

FdS-261

MAY 1976

FEED Situation



ECONOMIC RESEARCH SERVICE

U. S. DEPARTMENT OF AGRICULTURE

TABLE 1.—CORN: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1970-76

YEAR BEGINNING OCT. 1	SUPPLY			DISAPPEARANCE			ENDING STOCKS SEPT. 30		
	DOMESTIC USE			EXPORTS			PRIVATELY		
	IMPORTS	PRODUCTION	TOTAL	FOOD	INDUSTRY	TOTAL	DISAPPEAR- ANCE	HELD	GOVT.
MILLION BUSHELS									
1970/71	1,005	4,152	4	5,161	3,591	396	3,977	517	4,494
1971/72	667	5,641	1	6,309	3,978	409	4,387	796	5,183
1972/73	1,126	5,573	1	6,700	4,310	423	4,733	1,258	5,991
1973/74	709	5,647	1	6,357	4,193	438	4,631	1,243	5,874
1974/75 2/	483	4,664	2	5,149	3,187	454	3,641	1,149	4,790
1975/76 3/	359	5,767	1	6,127	3,650	465	4,115	1,600	5,715
1976/77 *	412	6,381	1	6,796	4,115	485	4,600	1,250	5,950
		(4,350)		(4,320)	(4,200)	(4,150)	(4,200)	(4,150)	(4,300)
									944 (4,300)
GOVT.									
PRICE SUPPORT OPERATIONS									
RECEIVED									
BASE OR FALLOWMENT	SET- ASIDE	HAR- VESTED	PER ACRE	NO. 2	NO. 2	NO. 2	NATIONAL AVG.	NATIONAL AVG.	TOTAL PAYMENTS
		PLANTED	FOR GRAIN	FARMERS	YELLOM	YELLOM	LOAN RATE	LOAN RATE	LOAN RATE
			ACRE	4/	;	;	5/	5/	5/
MILLION ACRES									
BUSHELS									
DOLLARS									
1970/71	90.3	26.1	66.8	57.4	72.4	1.33	1.47	1.39	1.05
1971/72	90.2	14.1	74.1	64.0	86.1	1.08	1.23	1.34	1.05
1972/73	88.1	24.4	67.0	57.4	97.1	1.57	1.91	1.60	1.17
1973/74	88.7	6.0	71.9	61.9	91.2	2.55	2.95	2.79	3.11
1974/75 2/	6/	0	77.8	65.4	71.4	3.03	3.12	3.05	3.26
1975/76 3/	6/	0	77.9	66.9	86.2	2.46	7/	2.61	1.10
1976/77 *	6/	0	82.7	71.7	89.0	(4,-5)	7/	1.10	0
									244 8/
									91 8/
									1.25
MILLION DOLLARS									

1/ UNDER LOAN TO OR OWNED BY CCC; FOR YEARS PRIOR TO 1973 CCC'S INVENTORY DOES NOT INCLUDE QUANTITIES COMMITTED FOR SALE. 2/ PRELIMINARY. 3/ BASED ON MAY 1976 INDICATIONS. 4/ EXCLUDES SUPPORT PAYMENT. 5/ AVERAGE EARNED ON TOTAL CORN PRODUCED. 6/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 7/ OCTOBER-APRIL 1975/76 AVERAGE. 8/ DISASTER PAYMENTS. * PROJECTED.

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Special Article

Butell and Womack continue to identify factors that influence quarterly feed demand for corn—In this report they analyze April-June feed demand (page 21)

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SUMMARY

With an unusually mild and open spring, farmers got off to their earliest start ever in grain planting and crop prospects so far are generally favorable in most major producing areas. Assuming normal weather, the 1976 corn crop is projected at 6.0 to 6.7 billion bushels, up from the previous 5.8-billion-bushel record in 1975. Production of the four feed grains (corn, sorghum, oats, barley) is projected at 207 to 231 million short tons, compared with 202 million in 1975.

If crop production is within this range, prices at harvesttime will likely slip moderately below those of last October-December. In this event, a rise of

about a tenth in domestic feeding in 1976/77 is projected and would be the dominant price-supporting factor. But decline of almost a fifth in exports is projected if world crop prospects continue normal.

Feed grain prices have been comparatively stable since early 1976 while substantial increases in livestock and poultry feeding have been developing and exports are moving toward a new record high for 1975/76.

The relationship of livestock and poultry prices to feed costs generally has encouraged feeders to expand their operations since about mid-1975. Increases in feeding began to get underway late

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last summer when it seemed likely that the corn crop would be large enough to hold feed costs in 1975/76 below the historically high levels of the year before. Cattle placements have been heavy since last summer, and substantially larger numbers on feed began showing by November. Pigs born in the first stages of the current hog expansion are nearing slaughter weights. Broiler meat output is running near industry capacity, with production in January-March up a whopping 15 percent. Milk-feed prices also have turned favorable for dairy production.

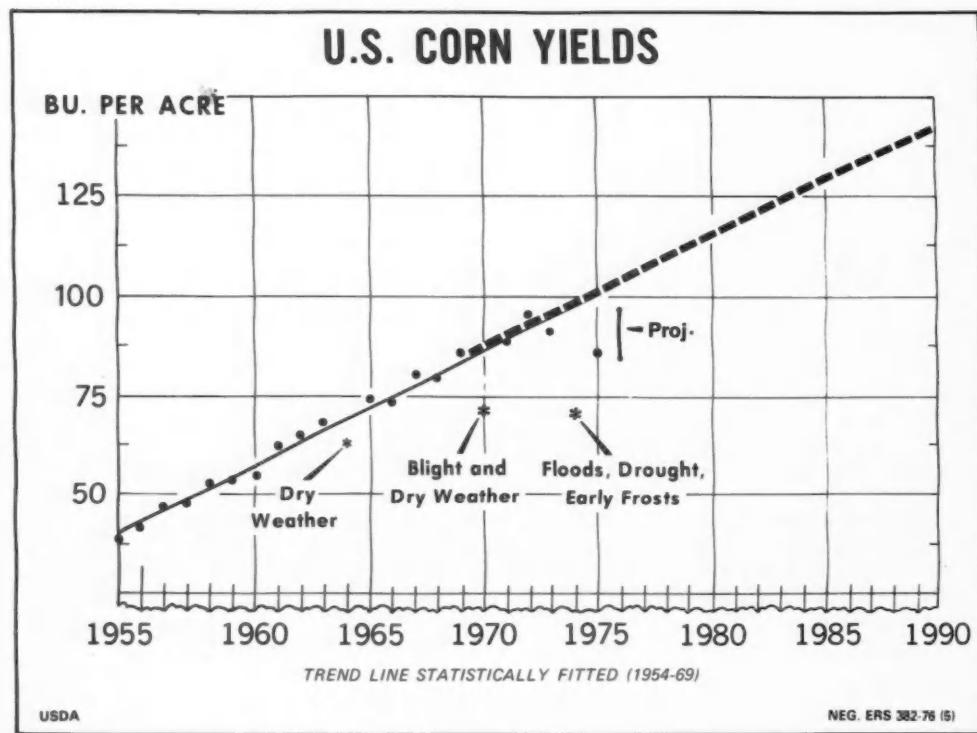
In October-December 1975, feed grain use for domestic feeding was 3 percent less than a year earlier; in January-March, the expansion in feeding operations was in full swing and feeding use was a fifth more than a year earlier. Feed use in October 1975-March 1976, the first half of the 1975/76 year, was 7 percent larger than a year earlier. The expansion is expected to continue and feed grain use for domestic feeding in this marketing year probably will be 12 percent larger than in 1974/75.

Feed grain exports in 1975/76 are expected to total about 53 million short tons, 35 percent more than in 1974/75 and 21 percent more than the pre-

vious record 44 million tons in 1973/74. Most of the increase from last year is due to larger exports of corn to the USSR, Eastern Europe, and the European Community. Exports and outstanding sales to the USSR this season now total about 12 million metric tons (13 million short), virtually all corn.

Increases in domestic disappearance and exports of feed grains combined in 1975/76 will just about use up the 16-percent increase in supply over 1974/75. Carryover stocks at the end of 1975/76 are expected to total only about 18 million tons, little different from the very low 1974/75 carryover. Therefore, the immediate future in the feed grain and livestock economies is heavily dependent on 1976 harvests and on crop prospects around the world, as well as on the state of the general economy here and in other major grain-using countries.

Soybean meal supplies are running at all-time highs in 1975/76 and prices of high protein feeds relative to feed grain prices are lower than usual. Therefore, there has been some substitution of high protein feeds for grains in feed rations. Along with the expansion in livestock and poultry feeding, this is responsible for sharp increases in the soybean crush and in meal disappearance.



FEED SITUATION



PROJECTIONS FOR 1976/77

SUPPLY

More Corn but Slightly Less Sorghum, Oats, and Barley Acreage Planned

As of April 1, farmers planned to seed about 126½ million acres to feed grains, roughly 3 million more than last year. Planned corn acreage was almost 83 million acres, around 2 million more than intended on January 1 and nearly 5 million more than in 1975. If planted, this corn area would be the largest since the late 1940's when 85 to 87 million acres were seeded.

About three-fifths of the prospective expansion in corn acreage is in the Corn Belt. About 2 million of the additional acres are in the eastern portion where farmers appear to be shifting about 1½ million acres from soybeans. This shift reflects costs and returns ratios favoring corn over beans this year. Farmers also are concerned about the price outlook for soybeans as competition from palm oil imports and Brazilian soybean exports mount. Also, there will be a relatively large domestic carryout of soybeans in September.

With the unusually mild and open spring, farmers are getting off to their earliest start ever in planting of spring crops. Some reports indicated that during the first week of April corn was planted as far north as southern Illinois. As of May 2, 43 percent of the intended acreage in Illinois had been planted compared with 9 percent for average.

Prospective sorghum plantings totaled 18 million acres, slightly below a year ago, possibly because of increased cotton plantings and a continued expansion in corn acreage in the Texas High Plain. With moisture conditions improved in the drought-afflicted area of the Southern Plains, sorghum may be planted on abandoned winter wheat acreage. As of late April, sorghum stands in southern Texas made excellent growth and good rains provided enough moisture for germinating the rest of the crop.

Increased spring wheat plantings appear to be edging oats and barley aside. Intended oat acreage of 17 million would be a shade below last year and continues the general downtrend of recent years. Indicated barley acreage totaled a little more than

9 million, a shade less than in 1975. Oat and barley seedings got off to an unusually early start this spring.

Feed grains January 1 prospective plantings with comparisons

Crop of—	Prospective		July 1 forecast	Jan. 1 (following year)
	Jan. 1	March 1		
	Million acres	Million acres	Million acres	Million acres
Corn				
1971	71.0	71.5	74.7	74.1
1972	71.2	68.5	66.8	66.8
1973	71.5	71.6	72.5	71.6
1974	78.8	78.8	77.7	77.7
1975	77.4	75.3	77.5	77.9
1976	80.8	82.7		
Sorghum				
1971	20.2	20.2	20.7	21.3
1972	19.8	18.4	17.4	17.5
1973	19.1	17.5	19.5	19.3
1974	19.6	19.0	17.8	17.7
1975	19.4	18.9	18.2	18.3
1976	18.6	17.9		
Oats				
1971	23.5	23.2	21.9	22.0
1972	21.1	21.0	20.5	20.3
1973	20.5	20.5	19.4	19.2
1974	19.0	18.9	18.3	18.0
1975	17.5	18.2	17.4	17.4
1976	17.1	16.8		
Barley				
1971	11.0	10.9	11.2	11.1
1972	10.1	10.4	10.5	10.6
1973	10.5	11.0	11.4	11.3
1974	9.6	9.5	9.2	9.0
1975	9.8	10.2	9.6	9.5
1976	9.5	9.2		
Total Feed grains				
1971	125.8	125.8	128.5	128.5
1972	122.2	118.3	115.2	115.2
1973	121.6	120.6	122.8	121.4
1974	127.0	126.2	123.0	122.6
1975	124.1	122.6	122.7	123.1
1976	126.0	126.6		

¹ April 1.

Corn Yields May Drop, But Larger Crop Expected

The national corn yield for 1976 is projected between 84 and 94 bushels per harvested acre—assuming normal planting, growing, and

harvesting conditions. The 5-million-acre increase in prospect for corn plantings is largely the reason for lowering the yield range from last year's projection of 87 to 97 bushels. As a general rule every 1-million-acre change in corn planting is associated with a $\frac{1}{2}$ bushel change in yield in the opposite direction (other factors constant). In addition, 2 million acres of the increase is outside of the Corn Belt where yields are traditionally lower.

The April 1 prospective plantings of corn plus the 84 and 94 bushel yield range would result in a potential record corn crop of 6.0 to 6.7 billion bushels and compares with 1975's production of 5.8 billion. Potential crops of the other feed grains in 1976 compared with 1975 are sorghum, 710-810 million bushels (758 million); oats, 600-700 (657), and barley, 355-385 (383). Total output of feed grains is projected to range between 207 and 231 million short tons, compared with 202 million in 1975. But if poor weather should develop during the critical part of the growing season as it did in 1974, production could fall significantly under 1975. On the other hand, if weather is excellent for growing and harvesting crops, production could significantly exceed the upper end of the range.

Weather Again Critical For 1976 Feed Grain Crops

With carryover stocks of feed grains this fall continuing at comparatively low levels, weather for crops will again play a dominant role in the outcome of feed grain supplies for the 1976/77 season. Feed grains generally are in tighter supply than wheat and soybeans as we move into the 1976/77 season. Precipitation and temperature are the two key weather factors affecting the outcome of crop production. What to look for in weather developments in the corn crop is discussed on page 56.

In general, the winter in the western parts of the Nation was mild, but in the eastern portion it was fairly normal through January. During February and March, Old Man Winter saw unusual spring-like temperatures throughout much of the Nation. Such weather enabled feeders to conserve feed as animals came through the winter under less stress than normal.

Moisture since September 1975 was mostly good to excellent for the eastern half of the country, but was generally below normal in some parts of the West North Central (WNC) region.¹ After experiencing severe drought in 1974 and generally dry

weather in 1975, pockets in the WNC region are unusually low in subsoil moisture. However, beneficial rains fell in the West during April, though more is needed to replenish subsoil moisture. With its greater acreage, the WNC region traditionally produces more corn than East North Central region.²

Corn acreage yield and production

Item	1973	1974	1975	1976 ¹
Acreage planted (mil.)				
ENC ²	24.0	25.9	26.4	28.7
WNC ³	33.4	36.5	35.6	36.6
Other U.S.	14.5	15.3	15.9	17.4
Total U.S.	71.9	77.7	77.9	82.7
Acreage harvested for grain (mil.)				
ENC ²	21.6	23.1	24.1	
WNC ³	29.7	30.5	30.6	
Other U.S.	10.6	11.8	12.2	
Total U.S.	61.9	65.4	66.9	
Yield per harvested acre (bu.)				
ENC ²	95.5	75.4	102.2	
WNC ³	94.7	67.9	78.5	
Other U.S.	72.6	72.1	73.9	
Total U.S.	91.2	71.4	86.2	
Production (mil. bu.)				
ENC ²	2,063	1,741	2,466	
WNC ³	2,814	2,072	2,400	
Other U.S.	770	851	901	
Total U.S.	5,647	4,664	5,767	

¹ April 1 indications. ² Ill., Ind., Ohio, Mich., Wisc., ³ Ia., Neb., Minn., S. Dak., N. Dak., Kas., Mo.

Crop Input Situation Improved

Despite plans for 4 million more acres of major cropland, (feed grains, wheat, soybeans, cotton and hay) farmers this season face the best input supply-price situation for some inputs in a few years. Although input prices as a whole may still be rising, the rate of increase has slowed markedly and for some items, particularly fertilizer, prices have turned down sharply because of more adequate supplies. Growers may also be paying less for pesticides because supplies likely will be up sharply.

¹ Iowa, Minnesota, Nebraska, Kansas, Missouri, North and South Dakota.

² Illinois, Indiana, Michigan, Wisconsin, and Ohio.

Fuel supplies, in general, will pose few if any problems; supplies overall are plentiful, and gasoline and diesel fuel prices are down 1 to 2 cents per gallon from last fall.

Fertilizer prices and use on corn land

Item	1973	1974	1975	1976
	Dollars per ton	Dollars per ton	Dollars per ton	Dollars per ton
Prices paid, April 15				
Anhydrous ammonia	88	183	265	191
Superphosphate (20% P_2O_5)	54	91	118	95
Potash (16% K_2O)	62	81	102	96
	Pounds per acre	Pounds per acre	Pounds per acre	Pounds per acre
Rate on corn area receiving (lb.):				
N	114	103	105	
P_2O_5	64	62	58	
K_2O	71	73	67	

DOMESTIC DEMAND

Feed Use to Increase Again

Present and near-term demand indications suggest that feeding will again increase in 1976/77. At present, most of the domestic feeding industries are operating in the black and are well into the expansion phase of production after the 1974/75 setback. Developments in the 1976 feed crops this summer will have a major price influence on the markets. In addition, feeding margins of the livestock and poultry industries also will influence feed demand in October-December. Though there were a few weeks in January-March when fed cattle prices were weak, livestock-feed price relationships generally have pointed to expanding output of milk, meat and eggs over the next few months. Predictions of continuing strong livestock and poultry prices for this summer suggest that feeding margins will encourage producers to expand production.

Should the feed grain crops turn out near the middle part of the range, 1976/77 domestic feed use of corn could exceed 4 billion bushels, compared with the 3.65 billion estimated for the 1975/76 season. Much of the extra corn used in 1976/77 would be to expand pork output as hog/corn price ratios encourage a sharp increase in farrowings for this year's fall June-November pig crop. In the event that feed grain production is near the low end of the range, feed use will still expand but at a somewhat lower rate.

WORLD COARSE GRAIN SITUATION¹

Increased Global Supplies and Expanded Feeding Seen for 1976/77

Projected world coarse grain production for 1976 of 694 million metric tons would be around a tenth more than last year's outturn on the basis of conditions through April 28. Winter weather was generally favorable for the Northern Hemisphere crop and if weather is normal through the remainder of the season, yields could approach record levels. Along with some increase in planting, this would contribute to a potential record coarse grain crop. A large part of the area increase is due to producers shifting from other crops such as oilseeds, where prospects for returns are less favorable than for coarse grains.

Expanding livestock feeding throughout most of the world is expected to result in about a 5-percent (30 million tons) increase in consumption of feed grains during 1976/77. For many major countries, such as Japan, the United States, and European countries, 1976/77 will continue the recovery in livestock feeding from 1974/75 when economic recession and poor feeding margins reduced livestock feeding. A recovery in feeding rates also is expected in the Soviet Union. In 1975/76 hog and poultry numbers had been reduced and livestock were generally on a maintenance ration as a result of short grain supplies.

Even though a larger supply of coarse grains would be a stimulus for expanding livestock feeding, it could lead to a buildup in 1976/77 carryout stocks well above the very low level of around 46 million metric tons forecast for July 1, 1976.

World and U.S. Trade May Drop From 1975/76 Record

If 1976/77 coarse grain supplies measure up to projections, especially in countries that grow much of their own requirements, world feed grain trade will decline. Imports during 1976/77 may possibly drop about a tenth from this year's unparalleled 82 million metric tons. Most of the decline would be attributed to the Soviet Union.

The United States is expected to account for about three-fifths of world exports of coarse grains in 1975/76 (July-June) and will likely maintain this "traditional share" during 1976/77.

U.S. exports of feed grains in 1976/77 are projected at 37 to 47 million short tons, down from

¹Largely based on *Foreign Agriculture Circular—Grains*, April 29, 1976, Foreign Agricultural Service, USDA.

this year's record-breaking 53 million tons. Corn exports may drop to 1.1-1.4 billion bushels compared with this year's expected 1.6 billion. Sorghum exports at 200 million bushels would be down about 50 million. With a continuation of relatively tight domestic supplies of sorghum in 1976/77, importers may find corn more competitively priced than sorghum. Barley and oat exports may be little changed from this year.

The Soviet Government's goal for the 1976 grain crop (including miscellaneous grain and pulses) is 205 million tons, which would be substantially more than the drought-stricken 140 million outturn in 1975. Even though winterkill was greater than usual, a larger area was sown to winter grain and moisture this spring is favorable for germination of spring planted crops. The 5-year agreement between the United States and the USSR provides that the USSR will buy a minimum of 6 million metric tons of U.S. corn and wheat in approximately equal amounts for shipment each year beginning on October 1, 1976. The Soviets may buy up to 8 million metric tons of U.S. grains in any 12-month period without consultation with the U.S. Government. In the event that the official USDA total grain supply falls below 225 million metric tons, the U.S. Government may reduce the quantity of wheat and corn available for purchase by the Soviet Union.

In late April and early May the Soviet Union made new purchases of U.S. grain—the first since last November. These sales included:

- 1) 2.7 million metric tons (106 million bushels) of corn for delivery by September 30, 1976.
- 2) 1.65 million metric tons (65 million bushels) of corn for delivery after October 1, 1976. This is the first feed grain sale under the 5-year U.S.-USSR grain agreement.
- 3) 550,000 tons (20 million bushels) of hard red winter wheat with deliveries beginning after October 1. This also is the first wheat sale under the 5-year agreement.

U.S. grain export commitments to the USSR for the 1975/76 marketing year total 16½ million metric tons, including approximately 12.1 million tons of feed grains (virtually all corn) and 4.4 million tons of wheat.

The Soviet Union also purchased about 2 million tons of wheat from Canada and 1 million tons from Australia during April—all 1976 crop.

Effective August 1 for 1976 crops, the European Community (EC) raises its own corn threshold price about 16 percent higher than the intervention (support) price of EC-grown feed wheat. Feed

wheat is a new grain standard; previously intervention prices applied only to milling wheat. Presently the EC has a large surplus of wheat and desires to move much of it into either feed or export markets. The EC also plans to offer some refunds to exporters of wheat to make it more competitive with feed grain in local feed markets. During July-June 1975/76, the EC likely will import about 26 million metric tons of feed grains, or around 14½ million from the United States. The new EC pricing policy plus the combined effect of a much larger total grain crop and greater feed use of wheat will probably mean reduced imports of feed grains for animal feeding. Corn and sorghum would both be effected by this decline, although the decrease may be greater for sorghum. The bulk of U.S. corn exports to the EC usually goes to West Germany, Italy, and the Netherlands.

World Highlights for 1976/77

The following are highlights of the early coarse grains outlook for countries that impact on world trade:

...Mexico—Imports may lag; larger domestic crop seen.

...Argentina and South Africa—Reduced harvests in early 1976 suggest their combined exports may be down 1-2 million tons.

...Canada—Intended barley acreage unchanged; exports may drop if Soviet crop goal is reached.

...Brazil—With good crop, exports could be as large as 3 million tons, double this year's movement.

...Japan—Continued recovery in livestock feeding means rising import requirements.

...Western Europe—Imports may decline because of larger harvest and European Community's (EC) new pricing policy which favors home-grown grain—particularly wheat.

...Eastern Europe—Imports may nearly equal this year's heavy volume of 7 million tons as livestock feeding continues to expand; imports of U.S. feed grains should be substantial.

...USSR—Even with large harvest, imports expected to be large though sharply down from this year. Soviets will purchase at least 6 million tons of corn and wheat between October 1, 1976 and September 30, 1977.

...Israel, South Korea and Taiwan—Expanding livestock economies may be stimuli for additional feed grain imports.

...India—Moderately larger winter wheat crop likely means reduced imports of U.S. sorghum.

DOMESTIC STOCKS AND PRICES

Further Recovery in Stocks Appears Likely

If production falls within the projected range, there would be some further recovery in feed grain stocks from the relatively low volume at the end of the current season. In this event, prices at harvesttime would slip moderately below those of last October-December. Increased feeding likely will be the dominant price-supporting factor. Export demand will be strong compared with most recent years, but compared to the extraordinary heavy volume exported this season, some of its upward price push will be lost. The fate of price levels this fall hinges heavily on the outcome of the crop which becomes visible to the market. Speculation about domestic and export demand for the upcoming marketing year as always are clouding the outlook for domestic livestock prices and the outcome of crops and grain demand in other countries. Forward domestic export sales or crop developments around the world this summer will give more insight as to prospective export demand in 1976/77. Historically, prices of a second big U.S. crop following a small crop usually decline more than seasonally from summer to autumn but also usually rise more than seasonally from their harvesttime low. If Mother Nature is unkind, as was the case in 1974, prices may be very strong at har-

vesttime. Should these high prices squeeze feeding margins, prices could then follow a contraseasonal pattern similar to that in 1974/75.

Farmers plan to reduce this year's soybean acreage a tenth or by more than 5 million acres. The big cutback will help support bean prices this fall and provide some underlying strength to corn as feeders may shift to more corn in their rations. Considering the potentially large wheat supply and a normal growing season for fall-harvested feed crops, corn prices at the farm during peak harvest may average moderately below the \$2.33 per bushel received during mid-November 1975.

WHITE CORN

Less White Corn Acreaged Planned

As of April 1, white corn producers in 10 leading States expected to plant 598,000 acres, 14 percent less than in 1975.

In 1975, white corn production in the 10 States totaled 42.6 million bushels, nearly 9 percent more than in 1974. Yields averaged 68 bushels per acre, 3 bushels more than in 1974.

White corn prices in 1975/76 have been substantially below the record high prices of 1974/75. In April No. 2 White at Kansas City was \$2.91 per bushel, 88 cents less than a year earlier.

White corn: acreage, yield and production

State	1974				1975				1976
	Acreage		Yield	Production	Acreage		Yield	Production	April 1 prospective plantings
	Planted	Harvested			Planted	Harvested			
	1,000 acres	1,000 acres	Bushels	1,000 bushels	1,000 acres	1,000 acres	Bushels	1,000 bushels	1,000 acres
Indiana	40	37	63	2,331	42	40	80	3,200	29
Illinois	50	49	70	3,430	45	44	90	3,960	35
Iowa	15	13	70	910	23	22	75	1,650	17
Missouri	70	67	50	3,350	57	55	69	3,795	30
Kansas	47	45	47	2,115	55	54	68	3,672	50
Kentucky	130	124	85	10,540	130	123	75	9,225	120
Tennessee	91	81	61	4,941	99	85	60	5,100	102
Texas	45	43	90	3,870	50	48	88	4,224	25
Total 8 States ...	488	459	69	31,487	501	471	74	34,826	408
Ohio	---	---	---	---	---	---	---	---	---
Nebraska	---	---	---	---	---	---	---	---	---
Alabama	46	40	44	1,760	70	60	47.0	2,820	90
Georgia	125	112	54	6,048	125	100	50.0	5,000	100
Total 10 States ...	659	611	64	39,295	696	631	68	42,646	598

HAY

Acreage Expansion Indicated

With a normal growing season, hay production this year should be slightly larger than in 1974/75. High hay prices continue to be a factor encouraging larger crops in most States. Only Iowa, Nebraska, Minnesota, Wyoming, and California reported smaller hay acreages than last year. New York farmers planned to increase hay acreage by 150,000 acres, reflecting dairy's need for more roughage supplies relative to feed grains. Prices will probably remain above last years through late July.

Year	Hay			
	Acreage harvested	Yield per harvested acre	Production	Season average price
	Million	Tons	Million tons	Dollars per ton
1969	59.7	2.11	126.0	24.70
1970	61.5	2.06	127.0	26.10
1971	61.4	2.10	129.1	28.10
1972	59.8	2.15	128.6	31.30
1973	62.1	2.17	134.8	41.60
1974	60.6	2.10	127.1	50.90
1975 ¹	61.9	2.15	132.9	53.00
1976	² 62.6	³ 2.16	³ 135.0	

¹ Preliminary. ² April 1 prospective plantings. ³ Projected.

1975/76 SITUATION & OUTLOOK

FEED GRAINS

Disappearance Increases With Larger Supply

The U.S. 1975/76 feed grain supply totaled 219 million short tons, 16 percent more than in 1974/75, due mainly to the record large 5.8-billion-bushel corn crop in 1975. As a result, feed grain prices have averaged somewhat lower than in 1974/75, domestic feeding of livestock and poultry is increasing appreciably, and feed grain exports will set a new record. Carryover stocks at the end of 1975/76 are expected to total about 18 million tons, not much different than the very low 1974/75 carryover. But a carryover of this size would still be much smaller than in most other recent years. In relation to total disappearance, it would be the smallest on record except for 1974/75, 1947/48, and the two most severe drought years of the 1930's.

Feeding Up Sharply From Year Ago

Feed grain use for domestic feeding of livestock and poultry is expected to total 129 million short tons in 1975/76, an increase of 12 percent over 1974/75. The expansion of domestic feeding in response to the more favorable outlook for livestock and poultry prices in relation to feed costs is now in high gear. Broiler meat output for January-March was up 15 percent. On March 1, there were 10 percent more hogs kept for breeding than a year earlier in the 14 major hog producing States, and producers were planning to have 10 percent more sows farrow in March-May and 11 percent more in June-August than in these periods in 1975. On April 1, there were 28 percent more cattle and calves on feed in the 23 major cattle feeding States than the low number a year earlier.

In October-December 1975, domestic feeding used 41 million short tons of feed grains, still 3 per-

Corn: Domestic and foreign market prices

Month/day ¹	1974/75					1975/76				
	Illinois mid-month farm price	Mo. av. No. 2 (fob) Gulfport	U.S. No. 3 Rotterdam cif	Argentina Plate Rotterdam cif	EC import levy	Illinois mid-month farm price	Mo. av. No. 2 (fob) Gulfport	U.S. No. 3 Rotterdam cif	Argentina Plate Rotterdam cif	EC import levy
	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel	Dollars per bushel
July 21	3.04	3.36	3.59	3.81	---	2.74	3.04	3.15	4.10	0.80
Aug. 25	3.44	3.70	3.98	4.22	---	2.98	3.34	3.75	4.28	0.22
Sept. 22	3.32	3.59	3.92	4.13	---	2.76	3.10	3.58	4.05	0.37
Oct. 24	3.54	3.86	4.27	4.47	---	2.57	2.96	3.24	3.75	0.73
Nov. 24	3.34	3.68	4.04	4.47	---	2.34	2.81	3.00	3.50	1.90
Dec. 23	3.33	3.69	3.99	4.50	---	2.37	2.77	3.02	3.53	1.06
Jan. 26	3.10	3.34	3.43	4.03	0.47	2.48	2.79	3.02	3.73	1.06
Feb. 24	2.92	3.06	3.32	3.73	0.82	2.54	2.88	3.08	3.65	1.08
March 23	2.75	3.05	3.33	3.94	0.87	2.56	2.87	3.09	3.60	1.13

¹ Day refers to Rotterdam market and EC import levy.

cent less than a year earlier, but in January-March 1976 feed use was 39 million tons, 20 percent more than a year earlier. In October-March, the first half of the 1975/76 feeding year domestic feeding use of feed grains totaled 80 million tons, 7 percent more than the 75 million tons in the first half of 1974/75.

Exports to Set New Record

Feed grain exports in 1975/76 likely will total about 53 million short tons, 35 percent more than in 1974/75 and 16 percent more than the previous record 44 million tons of 1973/74. During October 1975-March 1976, exports totaled 22 million tons, 34 percent above the same period a year earlier. Most of the increase is due to larger exports of corn to the USSR, Eastern Europe, and the EC.

The recent purchases of old-crop corn by the Soviet Union brings total commitments so far this season to about 13 million short tons, compared to only a million in 1974/75.

CORN

Feed Use Up Sharply in January-March

Sharply expanding cattle feeding and broiler production, favorable feeding margins for dairy, and the start of expanded hog feeding combined to push domestic corn feeding up a fifth from a year ago to 1.1 billion bushels for January-March. Feeding in that quarter was somewhat higher than expected and brought total feeding for the first 6 months of the marketing year to 2.2 billion bushels. This was 8 percent above that of last year when the U.S. feeding industry was undergoing heavy downward adjustments in response to unfavorable feeding conditions.

At present, the entire feed-livestock complex appears to be in generally good balance. Feed crop prices are above production costs, and livestock and poultry producers are also operating in the black. This combination of conditions set the stage for continued strong demand for feed during the next several months. In April-September, corn feeding is expected to increase 25 to 30 percent over last year's dwindling volume. Much of the increase will be in the summer which in 1975 was the lowest volume in some two decades.

In the February *Feed Situation*, concern was expressed of unfavorable developments for feeding cattle. In late January, fed cattle markets for Choice animals dropped to \$38 per cwt., well below computed total production costs of cattle on feed during the winter of around \$43.50 per cwt. Later in February and March, fed cattle dipped to \$34-

\$35, even below computed variable costs of about \$38 per cwt. But around mid-April cattle prices began to turn seasonally and jumped to \$43-\$45.

This level of cattle prices should sustain expansion in cattle feeding. While cattle on feed on April 1 in seven major States were up 34 percent from last year, placements during March were down 9 percent from a year earlier, which was the first year-to-year drop since July 1975. The decline in placements may have been partly in response to the negative returns from feeding cattle during January-March, as well as extremely heavy placements during February when cattle were moved off drought-shortened pasture. More pork production is scheduled this summer and near capacity broiler meat production will continue through the remainder of 1975/76.

Corn feeding during the entire season likely will total about 3.65 billion bushels, up 15 percent from 1974/75's 10-year low of 3.2 billion.

Export Movement Continues To Be Impressive

U.S. exports of corn at 406 million bushels in January-March were a little below the record-breaking pace of last fall when a phenomenal 454 million bushels moved overseas. This season's exports through April amounted to approximately 1,020 million bushels, for a weekly average of 33 million, and 265 million more than last year when the U.S. supply was tight. Exports for the entire season are projected to reach a record 1.6 billion bushels, some 450 million more than in 1974/75.

Most of this year's increase is due to the Soviet Union's heavy purchases of grain because of their crop shortfall. The Soviets are expected to import (from all sources) 25 million metric tons of grain (including 14 million feed grains) during July-June 1975/76, compared with only 5 million in 1974/75 and 10 million in 1973/74.

Through early May, actual shipments and outstanding export sales of U.S. corn to the Soviet Union totaled around 475 million bushels. Deliveries of corn to Soviet Union have been heavy so far this season, totaling 235 million bushels during October-March 1975/76. The recent purchases of U.S. grain by the Soviet Union are discussed on page 8.

U.S. corn exports to Western Europe (WE) during October 1975-March 1976 totaled 335 million bushels, 27 million less than last year (unadjusted for transshipments). For the entire year of 1975/76, exports to WE are projected to about match last year's 604 million bushels. Japan's imports of U.S. corn this year likely will total 220 million bushels, 12 million more than last year.

CORN DISAPPEARANCE

DOMESTIC  EXPORTS 

OCT.-DEC.

1965	1001	197
1966	1163	140
1967	1184	183
1968	1192	158
1969	1243	186
1970	1234	156
1971	1449	160
1972	1612	257
1973	1564	320
1974	1254	272
1975	1242	454
1976		
1977		

JAN.-MAR.

1012	171	
847	126	
919	158	
1135	71	
1206	139	
1103	121	
1147	173	
1189	302	
1274	338	
1029	379	
1214	406	

APRIL-MAY

593	121	
574	71	
620	86	
563	88	
627	92	
525	65	
665	126	
715	186	
723	243	
544	179	

1115	199	
1113	150	
1161	207	
1075	218	
1114	194	
1064	175	
1127	337	
1216	514	
1070	342	
814	319	

YEAR BEGINNING OCTOBER
MILLION BUSHELS

USDA

NEC. ERS 964-76 (S)

Eastern Europe is becoming a rapidly growing market for U.S. corn. Exports to Eastern Europe during October-March totaled 52 million bushels, 14 million more than last year. Shipments for the year could total as much as 80 million bushels, continuing the sharp upturn of recent years.

Total Use and Carryover Stocks

Total disappearance of corn in 1975/76 is forecast at 5.6 to 5.7 billion bushels, almost a fifth above last year's low volume. Since total use will be almost as large as the crop, only a modest recovery in October 1 carryover stocks is expected. Last year's carryover of 359 million was the smallest since 1948; carryover this October 1 may be below 425 million bushels. Thus, in contrast to wheat and soybeans (each with larger prospective carryovers), the actual supply situation for corn remains comparatively tight for the remainder of the season. Of course, this will be largely mitigated with a record crop developing.

Prices Firm But Hinge on Crop Prospects

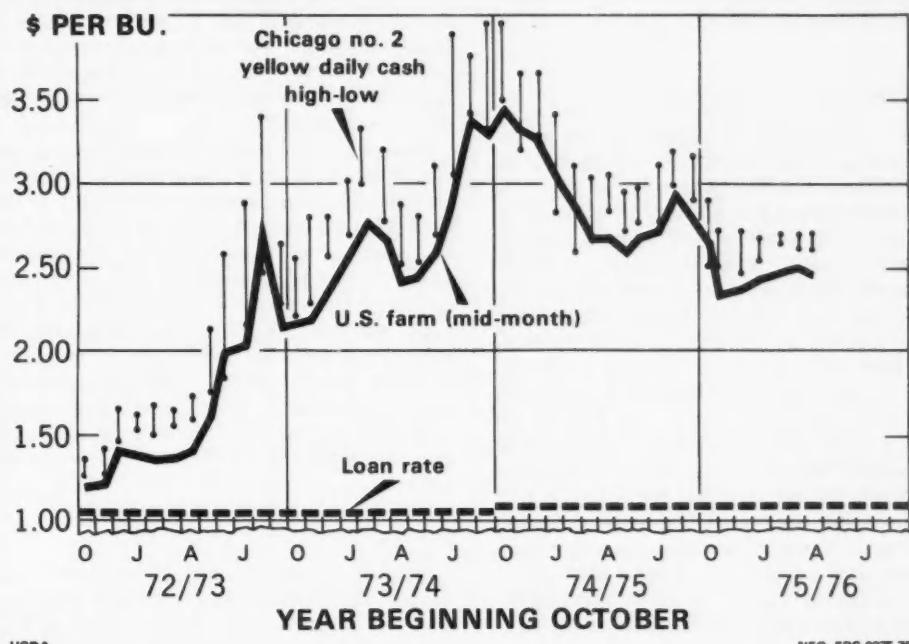
Prices of corn have been firm and relatively stable since January. In early May, prices at Chicago were being quoted at around \$2.75-\$2.80.

What prices do over the next few months largely hinges on developments of the new crop since the expansion in feed use now underway and prospective exports will lead to carryover stocks this fall only a shade larger than last year's small carryover. This sort of situation is pretty much a repeat of a year ago. The major difference is more fundamental strength as the livestock feeding industry is now in high gear while last year it was reaching the lowest production in decades.

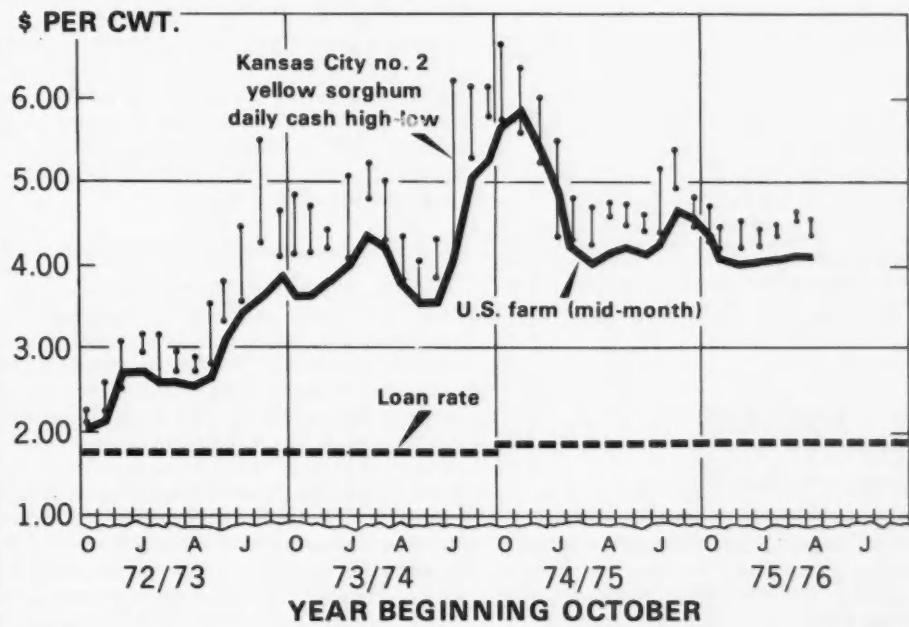
Feed use is gaining momentum. Continued heavy exports suggest a fundamentally strong market until the outcome of this year's crop becomes clearer. Crop developments as of early May point to another sizable gain in production. If these favorable developments continue and feeders buy on an as-needed basis, market prices this summer may decline. On the other hand, if weather becomes adverse and causes concern about the crop, grain suppliers may not be willing sellers. Early prospects for export demand for 1976/77 also will have an important bearing on the market's attitude this summer.

Some of this year's strength in the corn market may be attributed to drought in parts of the Plains States during the fall and winter which cut potential production of winter wheat. However, generous moisture in April benefited wheat, and the affected

CORN PRICES



SORGHUM PRICES



areas appear to have escaped the brunt of a full-fledged drought. With a bigger wheat carryover this summer, wheat supplies appear to be more than adequate to meet domestic requirements in 1976/77.

Quality of 1975 Corn Crop Excellent

To find a corn crop of as good quality as in 1975, one has to go back to 1971. From inspections by the Agricultural Marketing Service of receipts at major markets across the country in November and December, 70 percent of the sample graded No. 3 or better. In 1974, when the crop was damaged by adverse weather, only 53 percent of the sample graded No. 3 or better. Whenever 60 percent of a crop grades No. 3 or better, it is considered good to excellent.

The average test weight for 1975 corn measured 55.6 pounds per bushel, up from 54.1 pounds in 1974. Overall moisture content was 5 percent lower than a year earlier because of the nearly ideal open crisp autumn harvesting weather. Artificial drying was reported to be the lowest in several years. While the graded market receipts are not necessarily indicative of the quality of corn that stays on farms, presumably the year-to-year changes in quality would be applicable to corn used on farm.

Corn: Grades as a percent of market inspections¹

Grade	Crop of—				
	1971	1972	1973	1974	1975
<i>Percent Percent Percent Percent Percent</i>					
U.S. No. 1	5	3	2	3	5
U.S. No. 2	35	29	32	23	38
U.S. No. 3	33	29	30	27	27
U.S. No. 4	16	17	22	22	17
U.S. No. 5	6	15	9	14	9
U.S. Sample	5	7	5	11	4
Total	100	100	100	100	100

¹ Inspections made two months during and following harvest at major markets in producing areas.

Source: *Grain Crop Quality 1975* and earlier issues, AMS, USDA.

SORGHUM

Entire 1975 Crop To Be Used

Sorghum use in 1975/76 is predicted to total about 750 million bushels, roughly equal to production and leaving a minimal carryout this fall of around 35 million bushels. This would be the fourth consecutive year in which use matched or exceeded production.

Domestic feeding of sorghum in the first half of 1975/76 amounted to 417 million bushels, 13 percent above the pace of a year ago. This year's heavier feeding is due to larger supplies of lower priced sorghum and a sharp expansion in cattle feeding which began in late 1975. As indicated last fall, the 1975/76 sorghum supply is the tightest of all the feed grains.

Feeding of old crop in April-September is predicted to about match last year's 71 million bushels. In this event, and if the estimate of exports is reasonably accurate, some additional feed needs this summer will have to come from new crop sorghum harvested primarily in Texas and Oklahoma during July-September. There has been a significant amount of new crop sorghum fed and exported during the summer over recent years. In addition, some feeding of new crop wheat during April-September is likely. April 1 stocks of wheat indicated a significant volume (68 million bushels) may have been fed to livestock in January-March 1976.

Exports Moving at Strong Pace

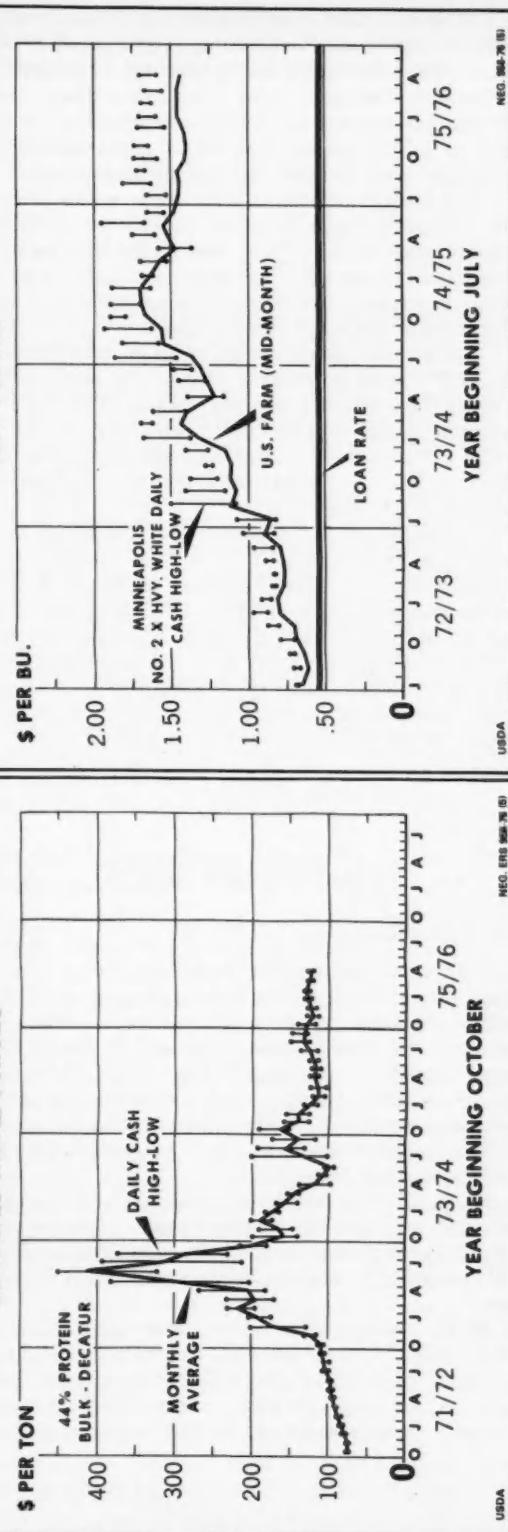
Exports during the first 7 months of the 1975/76 marketing year totaled 148 million bushels, 30 million more than a year earlier. Most of this year's shipments are going to Japan (60 million bushels), India (22 million bushels), Norway (3 million bushels), Netherlands (14 million bushels), Belgium-Luxembourg (12 million bushels), Venezuela (9 million bushels), and Israel (14 million bushels).

Sorghum exports for the entire season are forecast at 250 million bushels, compared with 212 million in 1974/75. If this level of exports is realized, shipments during the remainder of the year will be above the 92 million bushels exported in May-September 1975. In this event, a significant volume of the early 1976 Texas crop will move to overseas destinations in the summer.

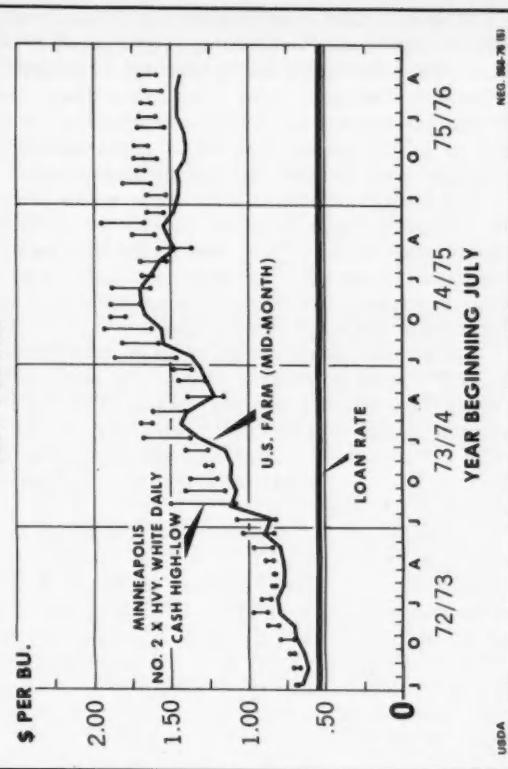
Sorghum Prices Firm Since December

With generally tight feed supplies and heavier feeding of cattle in the West, the sorghum market has been firm since advancing from its December low. In late April, No. 2 yellow sorghum at Kansas City was quoted at \$4.40-\$4.50 per cwt., as compared to the \$4.20-per-cwt. low in December. During recent weeks, there has been a tendency for the market to soften. This softness probably is in sympathy with the 20 to 25 cent drop in Kansas City wheat during April. But Kansas City sorghum also continues strong relative to corn prices, averaging nearly 100 percent of corn on a pound-for-pound basis. Sorghum prices over the next few weeks hinge primarily on 1976 crop developments and cattle placed on feed this summer.

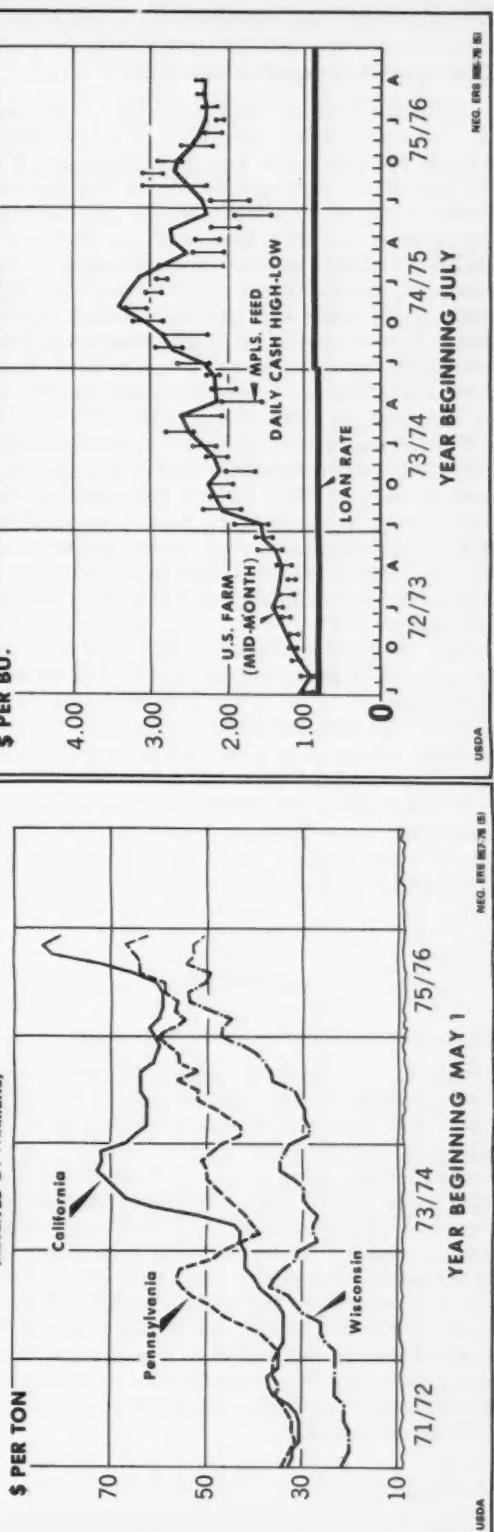
SOYBEAN MEAL PRICES



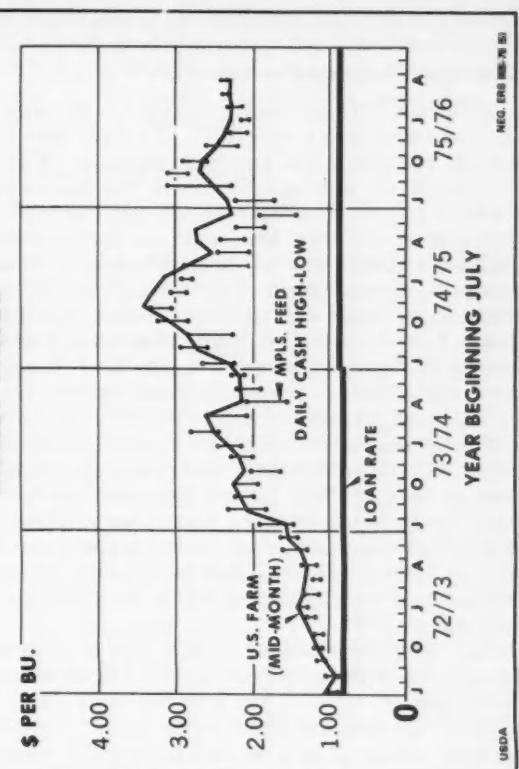
OAT PRICES



ALFALFA HAY PRICES (RECEIVED BY FARMERS)



BARLEY PRICES



OATS

Decline in Disappearance Continues

Although 1975 oat production was a little larger than the year before, the 1975/76 supply was 843 million bushels, down from 869 million in 1974/75 because of the very small carryin. The downward trend in supply and disappearance is expected to continue in 1976/77. Domestic use for feed has declined steadily; use for food, industry, and seed has not varied much from around 95 million bushels per year; and exports, always relatively small, have ranged sporadically from 11 million to 58 million bushels. Carryover stocks have declined from 410 million bushels at the end of 1972/73 to an expected 183 million bushels for 1975/76.

Use of oats for domestic feeding is expected to total 550 million bushels in 1975/76, 5 percent less than in 1974/75. Feed use has been smaller than a year earlier in each of the first three quarters of the 1975/76 marketing year. In the 9-month period of July 1975-March 1976, feed use totaled 461 million bushels, compared with 488 million bushels a year earlier.

Oat use for food, industry, and seed is expected to total 95 million bushels in 1975/76, 2 million more than in 1974/75 but 3 million less than in 1973/74. Exports are expected to total 15 million bushels, compared with 11 million in 1974/75 and 58 million in 1973/74.

Prices received by farmers for oats are expected to average about \$1.44 per bushel in 1975/76, compared with \$1.53 in 1974/75—the all-time high—and \$1.18 in 1973/74.

It seems that feed barley would have to be priced nearer to its traditional relationship with corn if substantially more feed use is to develop. This sort of situation may come about this summer if the barley crop is as large as projected. In this event, barley prices may show some significant seasonal weakness at harvesttime this summer.

But barley exports in April-June would have to be relatively large, at least 12 million bushels, if our forecast of 30 million bushels for the season is reasonably accurate. This volume of exports would tend to support the barley market until new crop becomes available in the summer.

Barley disappearance in 1975/76 is expected to total 370 million bushels, almost the same as the 368 million bushels the year before. This level of disappearance would leave carryover stocks on July 1 of about 108 million bushels, up from 75 million on July 1, 1975, but otherwise the smallest carryover in 10 years.

Prices of No. 3 or better feed barley at Minneapolis have been below a year earlier since October but in April averaged \$2.39 per bushel, compared with \$2.24 in April 1975. Malting barley prices continued below the unusually high prices of 1974/75. Prices of No. 3 or better malting barley (60 to 70 percent plump) at Minneapolis averaged \$3.01 per bushel in April, compared with \$4.26 in April 1975.

BARLEY

Disappearance Running Below Year Ago

Despite the improved supply situation, barley disappearance of 289 million bushels during the first three quarters of the marketing year was down 5 percent from a year earlier. Lagging exports are the main reason for this season's sag. During July-April, exports totaled 18 million bushels, down roughly a half from a year ago. Domestic feeding demand is very strong considering feed barley prices compared with corn. Feeding in July-March amounted to 164 million bushels, about the same as a year ago. But feed barley prices at Minneapolis during that period averaged about 10 percent higher than Minneapolis corn on a pound-for-pound basis. Feed barley usually is priced at about 90-95 percent of corn.

HIGH PROTEIN FEEDS

Large Supplies

Prices for most protein feeds this year are down about 6 percent from last year and are a good buy compared with grains and roughages. This situation is the direct result of several factors which have kept the lid on feed protein prices. The major factor is the extremely large domestic and international supply of protein products. Soybean meal (SBM) supplies are running at all-time highs for the current feed year.

Since SBM makes up approximately 70 percent of total high protein feeds—based on 44 percent crude protein equivalents—the dominant role of SBM insofar as protein feeds is concerned is obvious.

With Chicago No. 2 corn averaging \$2.68 a bushel and SBM (44 percent) averaging \$126 a ton at Decatur, SBM is also a feed concentrate "best buy." At 4.8 cents a pound for corn, SBM, on a feed nutrient basis, should be nearer 8 cents a pound, or

\$160 per ton. This situation last occurred during 1973/74. A comparison of the 3 previous feeding years with the current year illustrates this point:

	1972/73	1973/74	1974/75	1975/76
	Cents per pound	Cents per pound	Cents per pound	Cents per pound
SBM Decatur . .	8.60	7.92	6.76	6.30
Corn, Chicago . .	2.71	4.91	5.78	4.78
SBM/corn	3.17	1.61	1.17	1.32

Recently, the EC has imposed new, though indirect, import restrictions on feed protein, particularly soybean meal, to encourage greater feed use of their current nonfat dried milk surpluses. EC's surplus skim milk program impact on U.S. soymeal exports is discussed in April 1976 *Fats and Oils Situation*.

Another major factor contributing to lower domestic prices for protein feeds is the competition Brazil has shown in the international trade arena. Looking further ahead, it's possible to see additional competition for domestic oilseed meals from larger supplies of whey products in both the United States and Canada. Continued price pressures on feed protein may continue for the balance of this feeding year and into 1976/77. However, reduced soybean acreage and increased corn plantings this year may bring prices of protein feed relative to feed grains to a more normal ratio this fall and winter.

Domestic Situation Favors Protein in Least-Cost Rations

Current supplies of high protein feeds, monthly disappearance rates, and least-cost formulation indicate that the protein meal portion of rations for some meat animals (hogs and cattle, in particular) is well above normal. Hog producers may feel the additional protein will reduce feed-out time which may enable them to market their slaughter hogs while markets are strong. With cattle feeders, there may be some incentive to narrow the ratio of high energy feeds to protein in an effort to improve carcass grade and yield. Once protein-grain concentrate price ratios return to their historical relationships, ration formulation will probably return to normal. It seems likely that as the size of the upcoming soybean and grain crops becomes firm and hog production returns to early 1970 levels, feed grain use will increase relative to protein feeds.

For the 1975/76 feeding year, feed grain usage per grain-consuming animal unit will show an increase of 2 percent over the previous year, while protein feeds per high-protein animal unit may increase about 11 percent. The excellent quality of

last year's feed grain crops has provided increased feed values. With low-priced feed proteins coupled with higher quality feed grains available, producers should record greatly improved ratios of feed input to livestock product output.

SBM Disappearance Jumps

Domestic supplies of SBM are at an all-time high this year with disappearance, based on 44 percent crude protein equivalent, totaling 16 million tons, up 17 percent from 1974/75. This means an increase of nearly 40 pounds or 14 percent per high-protein animal unit. In 1974/75, many of the larger feeders had previously reduced SBM inventories when they curtailed feeding. With the upswing in placements and farrowings, some of the rapid increase in disappearance for SBM was probably "pipeline fill." Had the spring phase of the hog cycle come 6 months earlier, there probably would have been a much lower unit feeding rate as demand discouraged liberal feeding. Next fall and winter will probably see greatly reduced feeding rates for hogs and cattle as grain prices and protein feeds recover their former price relationships. Based on conditions and the prevailing outlook in March, consumption of SBM by class of livestock for the current feeding years shapes up as follows in terms of 44 percent crude protein:

	1973/74	1974/75	1975/76
	Thousand tons	Thousand tons	Thousand tons
Dairy	264	948	1,111
Beef	558	1,492	1,775
Poultry	7,378	6,250	7,264
Hogs	5,961	3,954	4,576
All others	1,031	997	1,282
	15,192	13,641	16,008

Cottonseed Meal Down

Reduced 1975 cotton production cut 1975/76 crushings 20 percent from year-ago levels. Total supply this year is 1.6 million tons (1.3 million at 44 percent SBM equivalent). Conditions point to consumption by class of livestock for this year to be about as follows in terms of 44 percent crude protein:

	1973/74	1974/75	1975/76
	Thousand tons	Thousand tons	Thousand tons
Dairy	178	241	209
Beef	803	661	573
Poultry	297	425	368
Hogs	156	118	103
All others	281	65	56
	1,715	1,510	1,309

With prospective cotton plantings expected to be over 16 percent from last year, cottonseed meal supplies next year should be up substantially, but still well below the 2-million-ton supply for 1974/75.

Other Oilseed Meals

Rounding out the oilseed meal supply picture are some relatively minor (viewed on a national basis) protein feeds, mainly linseed and peanut meal. However, there are regions where they are the major protein ingredient. Both of these meals have certain taste and odor characteristics that appeal to ruminant livestock and swine. Horse feed formulators prefer linseed meal, particularly if the animal is a family pet. Palatability of these meals sets them apart from many other concentrate feeds.

Preliminary estimates for 1975/76 show the combined tonnage for other oilseeds at 575,000 tons. Peanut meal supplies are estimated at 450,000 tons, up nearly three times over last year's supply. Linseed meal at 125,000 tons is also well above year-ago levels. On an SBM 44 percent crude protein basis, they contribute about 540,000 tons or 2 percent to high-protein feed supplies.

Fish Meal and Solubles

Disappearance of fish meal in 1974/75 totaled 437,000 tons, up 25 percent from 1973/74. For the first 5 months of this feeding year, disappearance is running 10 percent above the same months of a year ago. If poultry production continues to expand as expected through October, we foresee overall feed disappearance exceeding last year's volume by 2 to 3 percent. Fish meal prices (imported, East Coast) have remained relatively stable this year, ranging from \$257 per ton in early October to \$275 per ton in late January. Current prices are around \$270 per ton.

Meat Meal and Tankage

Total supply of meat meal and tankage for 1974/75 was 2 million tons. Practically all was fed. Production for the first 5 months of 1975/76 is about the same as a year ago. Prices have tended to remain about the same for the past few months after rising from a November low of \$147 per ton for 60 percent tankage and \$137 per ton for 50 percent meat meal. Current prices for tankage are \$167 per ton and \$157 per ton for meat meal.

Consumption of Animal and Marine Byproduct Feeds

The livestock industry salvages feed by recycling most of processors byproducts. Production of several recycled byproducts such as feather meal and poultry offal is regional in nature and is not included in national feed accounts. But often the protein quality or amino acid profile of these recycled byproduct feeds makes them rather marginal as far as feed protein value.

Fish meal is highly regarded as a protein feed supplement for poultry, and it also contains an unidentified growth factor which many nutritionists feel may act as some synthetic growth stimulants do when added to mixed feeds. Both marine and slaughter animal byproducts reduce the incidence of depraved appetites, which frequently result in cannibalism among poultry and hogs. Recent developments to synthesize essential amino acids have somewhat reduced the need to include animal-marine byproducts in poultry and sow and pig feed formulations. However, current prices for byproduct animal proteins have restricted synthetic amino acid use as a feed additive.

For the current feeding year, it is estimated that 2.1 million tons of animal byproduct proteins will be consumed by poultry. Hogs may consume about 630,000 tons while other off-farm livestock will claim about 340,000 tons.

Distillers' Dried Grains

Production for the 1974/75 feeding year was about 341,000 tons. Monthly production shows this year well ahead of 1974/75. Since monthly production variations are fairly small, it's a good bet that this year's monthly totals will continue above the corresponding month for 1974/75. Distillers' dried grain prices started this feed year with quotations of \$124 per ton, Cincinnati, then fell to less than \$100 in December, and advanced to the \$110-\$116 range for January-February. Current prices, f.o.b. Cincinnati, are at the \$98-per-ton level.

Brewers' Dried Grains

Brewers' dried grains production for 1974/75 totaled 345,000 tons and present indications would point to a better 1975/76 production year—barring extended labor disputes in the brewing industry. Most of our BDG is fed to dairy cattle with a limited quantity used in feed formulations for beef show cattle and horses.

Prices for 24 percent brewers' grains at Milwaukee have ranged from a low of \$83 in December to a high of \$107 per ton last January. Prices since January have softened with current quotations of \$80 per ton, Milwaukee base.

MOLASSES

Supplies Increase Sharply; Prices Lower But Rising

This season's feed molasses situation is one of steadily gaining supplies (imports) and rising prices triggered by the sharp increase in cattle feeding since last fall. Supplies of all types of feed molasses available from domestic sources in 1975/76 are projected to reach a record-breaking 457 million gallons, some 78 million or a fifth more than last year's comparatively low level (table 27). Beet molasses is expected to make up most of the increase because of a whopping 1975 beet crop measuring a third more than in 1974. In addition, the prospective large output of beet molasses also assumes a fairly high extraction rate of 6.8 gallons of molasses per ton of beets produced. The molasses extraction rate from the 1974 crop sugar beets was extremely high at 7.1 gallons per ton of beets produced, indicating that sugar yields were relatively low. Cane molasses production in Florida, Louisiana, Hawaii, and Texas combined is projected at 225 million gallons, up 35 million gallons from 1974/75. Imports are on the rise and may easily reach 400 million gallons, well above last season's low of 361 million which was the result of a sharp reduction in cattle feeding.

With stronger demand generated by expanded cattle feeding, molasses prices have turned up sharply since last fall. During May, blackstrap molasses at New Orleans was quoted at \$51 per ton, up substantially from the \$36 in October 1975 and near that of a year earlier. With the large supply from domestic sources and the slowdown in cattle placements during March, molasses prices may be near their peak for a while. If cattle prices remain strong as expected and numbers being placed on feed begin to surge upward again, some firmness in the market could develop again this summer. Prices of molasses this fall depend largely

on cattle feeding margins this summer and on the outcome of the 1976 domestic sugarcane and beet crops. Sugar beet planting intentions as of April 1 point to 1½ million acres, down 3 percent, but still a comparatively large area.

FORAGE FEEDS

Forage feeds, both harvested and pasture, contribute better than two-thirds to total annual feed consumption measured in corn equivalents.¹ Current estimates for 1975/76 show a decrease from last year's level due to the smaller beef herd. Roughage feeds for sheep have also continued to decline reflecting the long downward trend in sheep numbers.

Preliminary projections for 1975/76 on consumption of feed units from roughages show an increase from harvested roughages but an offsetting drop in feed units from pasture. Overall roughage feed units by species of livestock shape up as follows:

Milk cows	Up 2 percent—More pasture
Other dairy	Up 1 percent—More pasture
Cattle on feed	Up 60 percent—Placements way above last year; also consumption rate per head up.
Other beef cattle	Down 6 percent—Inventories down; pasture units down 9 percent
Sheep and goats	Down 9 percent—Inventories and consumption rate per head down.
Hogs	Down sharply—Lower feed concentrate prices places near total reliance on feed concentrates.
Horses and mules	Up 7 percent—Continued increase in horse numbers and rate per head up about 4 percent.

¹Feed unit—the quantity of any feed that is equivalent to the feeding value of a pound of corn.

MARKETING YEAR CHANGED FOR SOME GRAIN CROPS

Beginning June 22, the USDA's Statistical Reporting Service will report grain and oilseed stocks as of June 1 instead of July 1. This change matches the new June 1-May 31 wheat marketing year enacted by Congress in 1975. The previous marketing year for wheat was Jul 1 to June 30. The new marketing year starts with the major thrust of harvest, which over the years had advanced to June. There is a significant volume of winter wheat harvested and used during June in the southern half of the nation, which tends to dis-

tort April-June use data in a July-June marketing period.

Marketing Years Also Changed For Some Other Summer Harvested Crops

USDA shifted the oat, and barley years to June-May because a significant volume of these crops also is harvested during June. The marketing years for rye and flaxseed as well, have been changed to June-May. Marketing years for corn

and sorghum (October-September) and soybeans (September-August) remain unchanged. Considerable sorghum is harvested during July in south Texas, but because of the relatively long harvesting period (July-November) and desires of the industry to have sorghum on the same basis as corn, it was decided to leave the sorghum marketing year unchanged.

Thus, U.S. grain stocks will be published for June 1, October 1, January 1, and April 1 beginning June 1976. Instead of quarters, there will be new intra-marketing year periods. For wheat, rye, oats, barley, and flaxseed they are June-September (4 mos.), October-December (3 mos.), January-March (3 mos.), and April-May (2 mos.). For corn and sorghum the new periods are October-December, January-March, April-May, and June-September.

Adjusting Old July 1 Stocks to June 1: Methodology

To have a long-term series of supply and distribution information appropriate to the new June-May marketing year (oats and barley) and the new intra-marketing year periods for all grains, stocks have been adjusted to June 1. In the supply-demand balance accounts for feed grains, the volume fed to livestock and poultry in the period between stock releases (quarter) is calculated as a residual. For example, the volume of feed grains fed for a designated period is computed in the following manner:

1. Beginning supply less ending stocks = total disappearance.
2. Total disappearance less exports = domestic use.
3. Domestic use less domestic food, industry, beverage, and seed use = feed residual. The residual also includes waste and losses and any errors in estimates.

Monthly trade data for seed, dry and wet mill-

ing, distilling, and malting are either directly reported or estimated. Because there is no direct estimate of feed, it is therefore derived as a residual.

Monthly Meat Output Used To Estimate Monthly Feed Distribution

To estimate monthly feed use for the April-June quarter, a monthly demand indicator is used. Monthly federally inspected slaughter (FIS) is associated with feed intake. Thus, the FIS series on the monthly output of beef, pork, and poultry meat was used to derive the June (or April-May) feed residual.

Here is an example of how the April-May 1973 feed consumption and the new June 1 stocks of corn were calculated:

1. Red meat and poultry meat output prorated

April	May	June	Total
<i>Million pounds</i>			
3,296	3,937	3,748	10,981
<i>Percent of total</i>			
30.0	35.9	34.1	100
2. April-June 1973 corn feed use			
April-May meat output share			962 mil. bu.
April-May corn feed use			(65.9 percent)
3. June corn feed use			634 mil. bu.
			328 mil. bu.

Below is how the new balance sheet for the last half of the 1972/73 corn marketing year compares with data for the former quarters.

The new June 1, 1973, derived stocks total is 2,439 million bushels. The derived series based on the new marketing year and stock reporting changes are shown on pages 30-37. The authors of the *Feed Situation* welcome comments and suggestions concerning these estimates and their methodology.

	April-June (old)	April-May (new)	July-Sept. (old)	June-Sept. (new)
<i>Million bushels</i>				
Stocks, beginning	3,340	3,340	1,937	2,439
Imports	Neg	Neg	Neg	Neg
Supply	3,340	3,340	1,937	2,439
Disappearance				
Domestic				
Feed	962	634	743	1,075
Food, ind. & seed	118	81	109	141
Total domestic	1,080	715	852	1,216
Exports	323	186	376	514
Total disappearance	1,403	901	1,228	1,730
Stocks, end	1,937	2,439	709	709

APRIL-JUNE FEED DEMAND FOR CORN

by

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ABSTRACT: The third quarter of the corn marketing year (April-June) normally accounts for over one-fifth of the year's corn feed use. Multiple regression analysis is used in determining important variables influencing corn feed use. Lagged prices of livestock, corn, and soybean meal apparently are strong determinants of corn feed demand that reflect earlier decisions by livestock and poultry producers. Livestock output and corn prices in the current quarter also help to explain feed use. A projection for the April-June 1976 quarter indicates feed use will expand sharply from year-earlier levels.

KEYWORDS: Corn, feed demand, feed-livestock prices, April-June quarter.

This is the third in a series of articles examining factors that influence quarterly feed demand for corn.¹ The ordinary least squares approach is used to relate corn feed use in the April-June quarter (QCDF3) to explanatory variables associated with the U.S. livestock industry.

Feed demand in the April-June quarter of the marketing year has ranged between 21 and 24 percent of annual feed consumption since 1956/57. Except for the large cutback in 1975, April-June corn feed use has totaled well over 700 million bushels since 1966.

Several equations were examined for their usefulness in capturing economic variables that significantly influence feed demand. The demand

equation selected is similar to the equation used for January-March. It appears that economic relationships several quarters back, when feeders traditionally make operational decisions for the year ahead, strongly influence April-June feed use. In other words, current feed demand is directly linked to decisions made by livestock and poultry producers in the previous three quarters. Lagged input-output prices, together with two current economic factors, best explain current levels of corn fed to livestock. Equation results are given below for the historical period 1956/57 to 1974/75. Numbers in parentheses below the equation coefficients are "t" statistics, and the bracketed terms are elasticities computed at mean values of variables.

$$QCDF3 = 222.78 + 165.1929 LO + .7628 (PL/PC)* + 51.5254 (PM)* - 143.4153 PC$$

(5.53)	(2.70)	(4.45)	(2.72)
[.42]	[.25]	[.29]	[-.26]

R² = .95

S.E. = 29.9

D.W. = 1.90

Variable definitions are:

QCDF3: Quantity of corn fed in April-June (mil. bu.)

LO: Value of production of beef, pork, and broilers in April-June (\$ bil., in 1957-59 farm prices).

¹Robert Butell and Abner Womack, "October-December Feed Demand for Corn" *Feed Situation*, Economic Research Service, USDA, FdS-259, November 1975 and, same authors, "January-March Feed Demand for Corn," *Feed Situation*, Economic Research Service, USDA, FdS-260, February 1976. Related research references are contained in the bibliography of the first of these articles and will not be reproduced here.

PL: Index of prices received by farmers for livestock products in quarter (1910-14=100)

PC: Average price received by farmers for corn in April-June (\$/bu.).

(PL/PC)*: Average price ratio for the previous three quarters, i.e., $(PL/PC)^* = (PL-1/PC-1 + PL-2/PC-2 + PL-3/PC-3)$ divided by 3.

(PM)*: Average price of soybean meal for the previous three quarters, bulk Decatur, 44 percent (cents/lb.).

The negative coefficient on current corn price shows that higher corn prices reduce the quantity of corn demanded for feed. On the other hand, increases in livestock quantity (LO) will increase current feed demand for corn. Also, a positive change in the lagged livestock-corn price ratio (PL/PC)* and the lagged price of soybean meal (PM)* strengthens feed use. Thus, if livestock prices increase relative to corn prices in the previous three quarters, apparently there is an incentive to feed more corn. Likewise, if the average price of soybean meal for the previous three quarters rises, more corn will be fed, with feeders making early commitments to substitute corn for meal.

Other economic variables examined to explain current utilization such as current prices for sorghum, soybean meal, and livestock generally showed weak or insignificant responses. Thus, feed demand in the third quarter seems to conform to estimated patterns for the first two quarters in that livestock producers tend to feed out existing herds once they are established.

The direct price elasticity between use of corn and the current price of corn implies that a 10-percent increase in price will result in a 2.6-percent decline in feed use. This is about the same response to current price changes as was found in the fall quarter. A 10-percent increase in the livestock/corn ratio (PL/PC)* will result in a corresponding 2.5-percent increase in corn fed. An increase of 10 percent in lagged soybean meal prices (PM)* causes a 2.9-percent increase in corn feeding. Value of current livestock output (LO) has the strongest impact of the variables selected. A 10-percent increase in LO generates about a 4-percent increase in corn fed.

The figure (on page 24) shows the change in April-June corn feed use from a smooth upward trend to a more erratic trend beginning in the mid-1960's. This reflects, among other things, the volatile movements in grain and livestock prices in recent years which are associated with reductions in

world grain stocks and production. Approximately 95 percent of the variance is explained by the estimated relationship. Viewing this equation as a predictor and given the values of the determinants, the figure shows that the equation captured the large downturn in 1975 and tracks the historical period very well.

The largest errors for the equation occurred in 1966 and 1969. The underestimate in 1966 is apparently due to the 7-percent larger spring pig crop which was not yet fully reflected in LO. However, overall results were not improved when the spring (December-May) pig crop was used in the regression. In April-June 1969, a period of overestimate, crop quality may have been a factor. The grades of marketings of 1968 crop corn during and following harvest indicated the crop was of much better quality than in most years. This would tend to improve feeding efficiency and feed use would be lower than expected.²

Estimating Feed Use for April-June 1976

To illustrate the use of the equation, a projection for the April-June 1976 quarter was calculated. The following values for independent (determining) variables were used for the quarter.

$$\begin{aligned}(PL/PC)^* &= 199.0 \\ (PM)^* &= 6.4 (\text{¢/lb.}) \\ (PC) &= 2.50 (\$/bu.)\end{aligned}$$

The value aggregate for beef, pork, and broilers (LO) was calculated using April-June 1957-59 average prices and April-June production forecasts for this year as follows:

Item	Production	1957-59 prices		Value
		Mil. lbs.	Cents/lb.	
Beef	6,200	23.74	1.472	
Pork	2,800	17.99	.504	
Broilers	2,265	18.60	.421	
Total	11,265		2.397	

The estimated livestock production aggregate (LO) for the April-June 1976 quarter totals \$2.397 billion, or 7.6 percent above the period a year earlier. Greater livestock output together with a higher lagged livestock/corn price ratio and a lower current corn price indicate an expansion in April-June corn feed use in 1976 over the same quarter a year

²See: *Feed Situation*, Economic Research Service, USDA, FdS-228, April 1969, p. 11.

Corn: Quantity used for livestock feed and related variables, United States, 1956/57 to 1975/76

		Value aggregate (1957-59):								
Year beginning	corn demand for feed	farm prices) of beef, pork, and broiler production	Lagged livestock/corn price ratio (PL/PC)*	Lagged wholesale price of soybean meal (PM)*	Price received by farmers for corn April-June (PC)					Quantity of corn demand for feed annual (QCDFY)
Oct. 1	April-June	(QCDP3)	(LQ)							
		Mil. bu.	Bil. dol.			Cents per lb.		Dol. per bu.		Mil. bu.
1956/57	509.9	1,352	180.1	2.43	1.22					2,378.3
1957/58	584.7	1,318	248.2	2.40	1.15					2,533.8
1958/59	624.9	1,429	255.6	2.93	1.15					2,783.0
1959/60	673.8	1,495	240.9	2.85	1.08					3,043.0
1960/61	693.4	1,595	256.8	2.67	1.01					3,092.2
1961/62	694.2	1,605	249.2	3.04	1.03					3,212.5
1962/63	697.9	1,691	244.1	3.57	1.12					3,155.8
1963/64	697.7	1,850	215.6	3.74	1.16					3,008.9
1964/65	665.4	1,754	206.5	3.39	1.25					2,956.1
1965/66	805.8	1,879	245.6	3.70	1.20					3,361.2
1966/67	769.1	2,017	221.9	4.26	1.26					3,328.1
1967/68	807.9	2,049	260.4	3.77	1.07					3,508.2
1968/69	745.1	2,066	286.4	3.82	1.16					3,579.2
1969/70	866.4	2,213	299.4	3.89	1.18					3,796.3
1970/71	771.9	2,298	232.9	4.00	1.41					3,581.3
1971/72	901.5	2,312	305.4	4.02	1.14					3,977.8
1972/73	962.6	2,140	320.5	7.35	1.67					4,310.0
1973/74	935.4	2,366	219.7	10.01	2.48					4,193.0
1974/75	679.0	2,227	136.8	6.94	2.67					3,187.0
1975/76	1,740.0	2,397	199.0	6.40	2/2.50					1/3,650.0

1/ Forecast. 2/ Estimated.

ago, despite a more competitive soybean meal price (see page 23). Using the above values for the explanatory variables, the equation gives an estimated feed use of 740 million bushels, about 9 percent above a year earlier. These results, of course, depend on the accuracy of our estimates of the current quarter price of corn and livestock output; however, all other variables in the estimating equation are known since they represent lagged influence.

The equation solution shown here should be considered in relation to other market conditions and indicators for feed demand shown on page 52 of the *Feed Situation*. Animal inventory numbers

indicate an expansion in feed use is in process. The December 1975-February 1976 pig crop was 16 percent above the previous year. Hogs are major consumers of corn and these animals will be on full grain-protein rations in April-June. Cattle-on-feed inventories on April 1 in the 23 major cattle feeding States were up 28 percent from a year earlier. Broiler meat production is around 10 percent above year-earlier levels, while egg production has been up only about 1 percent. Despite this year's excellent quality crop, the sharp expansion in cattle on feed and increased hog numbers indicate that April-June feed use will likely be higher than the level shown by the equation results.

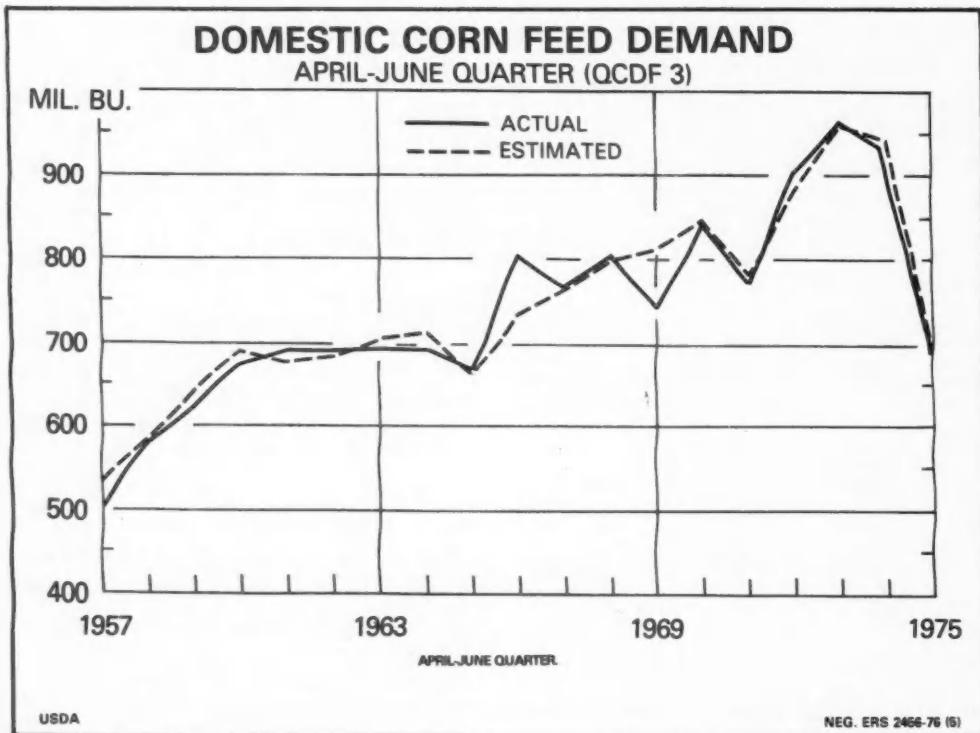


Table 2.—Corn: Distribution for food, industrial, beverage and seed use
(Marketing year beginning October)

Item	1966	1967	1968	1969	1970	1971	1972	1973	1974*	1975**
Million bushels (grain equivalent)										
Shipments—(Food, industrial & alcohol use)										
Wet corn milling (grind)	206	210	207	216	242	246	284	294	315	325
Corn meal (regular & degerned)	41	37	33	28	24	21	20	19	18	18
Corn flour etc.	2	3	4	6	8	10	12	14	13	15
Hominy grits (food)	26	24	21	19	17	14	13	13	10	11
Breakfast foods 1/	24	21	22	23	23	24	24	25	24	24
Alcoholic beverages:										
Distilled liquors	33	34	33	31	24	25	29	33	16	20
Fermented malt liquors	41	40	42	43	45	45	45	47	49	49
Total shipments	372	369	362	366	383	385	427	445	445	462
Seed	14	13	12	13	17	15	16	18	18	18
Trade—Corn products										
Imports										
Meal	3	5	11	6	7	73	27	65	125	
Exports										
Meal (relief programs and comm'l. sales)	16,477	14,970	9,996	9,239	7,915	5,486	8,004	8,458	5,781	
Hominy grits	1,245	1,275	1,536	1,928	4,309	1,758	2,114	1,641	1,275	
Starch			1,915	1,522	1,385	1,394	1,896	2,676	3,229	
Sugar (Dextrose)			1,180	1,085	1,015	1,571	2,310	2,383	2,346	
Syrup (Glucose)			NA	NA	669	426	419	357	391	468

Shaded numbers are largely based on the 1967 and 1972 Census of Manufactures; intra Census years are interpolations.
1/ Assumes sizable quantities of corn flour are purchased by breakfast food manufacturers from the dry milling industry.

*Preliminary. **Forecast.

TABLE 3.--FEED GRAINS: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1970-76 1/

YEAR 2/	SUPPLY			DISAPPEARANCE			ENDING STOCKS		
	BEGINNING STOCKS	PRODUCTION	IMPORTS	DOMESTIC USE	EXPORTS	DISAPPEAR- ANCE	TOTAL	PRIVATELY HELD	TOTAL
	2	2	2	2	2	2	2	2	2
MILLION SHORT TONS									
1970/71	48.6	460.1	409.1	138.9	16.3	155.2	20.7	175.9	19.0
1971/72	33.2	207.7	5	241.4	149.0	16.7	27.3	193.0	30.5
1972/73	48.4	199.9	4	248.7	156.2	17.0	43.1	216.3	10.7
1973/74	32.4	205.0	2	237.6	153.3	17.7	44.6	215.4	20.3
1974/75 4/	22.2	165.3	5	188.0	115.0	18.0	39.2	172.2	14.9
1975/76 5/	15.8	202.4	5	218.7	129.4	18.4	47.8	52.8	200.6
1976/77 *	16.1	219.3	3	239.7	143.6	19.1	41.9	204.6	33.1
		(+,-12)	(+,-12)	(+,-7)	(+,-7)	(+,-7)	(+,-5)	(+,-10)	(+,-10)
ACREAGE									
HARVESTED PER ACRE									
BASE OR SET- ASIDE									
PRICE RECEIVED BY FARMERS 6/									
-- MILLION ACRES -- --									
1967-100									
1970/71	133.0	37.4	118.8	99.3	1.61		110		1,510
1971/72	132.9	18.2	128.0	106.3	1.95		96		1,060
1972/73	129.8	36.6	115.1	94.0	2.13		141		1,065
1973/74	130.0	9.4	121.4	102.4	2.00		222		1,171
1974/75 4/	89.0	—	122.5	100.6	1.64		250		328 8/
1975/76 5/	89.0	—	123.1	104.8	1.93		214 7/		116 8/
1976/77 *	89.0	—	126.6	107.0	2.05		(+,-13)		

1/ AGGREGATED DATA ON CORN, SORGHUM, OATS AND BARLEY. 2/ THE MARKETING YEAR FOR CORN AND SORGHUM BEGINS OCT. 15 JULY 1 FOR OATS AND BARLEY. 3/ UNDER LOAN TO OR OWNED BY CCC; FOR YEARS PRIOR TO 1973 CCC'S INVENTORY DOES NOT INCLUDE QUANTITIES COMMITTED FOR SALE. 4/ PRELIMINARY. 5/ BASED ON MAY 1976 INDICATIONS. 6/ EXCLUDES SUPPORT PAYMENT. 7/ OCTOBER-APRIL 1975/76 AVERAGE. 8/ DISASTER PAYMENTS. * PROJECTED.

TABLE 4—SORGHUM: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1970-76

YEAR BEGINNING OCT. 1	SUPPLY			DISAPPEARANCE			ENDING STOCKS SEPT. 30				
	BEGINNING STOCKS	PRODUCTION	IMPORTS	DOMESTIC USE	FOOD	INDUSTRY AND SEEDS	EXPORTS	DISASTER ANCE	PRIVATELY: HELD	GOVT.	TOTAL
MILLION BUSHEL S											
1970/71	244	684	---	928	694	10	694	144	838	22	68
1971/72	90	876	---	966	692	9	701	123	824	50	92
1972/73	142	809	---	951	660	6	666	212	876	60	13
1973/74	73	930	---	1,003	701	7	708	234	942	59	2
1974/75 2/	61	629	---	690	437	6	443	212	655	35	0
1975/76 3/	35	758	---	793	500	6	506	250	756	37	
1976/77 *	37	758	---	795	539	6	545	200	745	50	(4, -25)
GOVT.											
PRICE SUPPORT OPERATIONS											
CITY/GULF PORTS:											
BASE OR SALVAGE:	SET- ASIDE	PLANTED: FOR GRAIN:	HAR- VESTED: BY ACRE:	RECEIVED: NO. 2 FARMERS 4/	NO. 2 YARDIN	WORTH: YELLOW	INTERNATIONAL NO. 2 SUPPORT PAYMENTS TO SALVAGE:	NO. 2 LOAN RATES: 5/	AVG. SUPPORT PAYMENTS TO SALVAGE:	NO. 2 LOAN RATES: 5/	INTERNATIONAL NO. 2 SUPPORT PAYMENTS TO SALVAGE:
DOLLARS											
MILLION ACRES											
1970/71	24.7	7.4	17.0	13.6	50.4	2.04	2.32	2.73	2.59	1.61	.33
1971/72	24.6	6.1	20.8	16.3	53.7	1.87	2.05	2.51	2.39	1.73	.31
1972/73	23.7	7.3	17.3	13.4	60.5	2.45	3.24	3.75	3.73	1.79	0
1973/74	23.9	2.0	19.2	15.9	58.7	3.82	4.64	5.13	5.07	1.79	0
1974/75 2/	6/	0	17.7	13.9	45.3	4.96	5.01	5.61	5.45	1.88	0
1975/76 3/	6/	0	18.3	15.5	49.0	4.13 7/	4.45 7/	4.92 7/	4.98 7/	1.88	20 8/
1976/77 *	6/	0	17.9	14.3	53.0	(4, -4)				2.12	

1/ UNDER LOAN TO OR OWNED BY CCC; FOR YEARS PRIOR TO 1973 CCC'S INVENTORY DOES NOT INCLUDE QUANTITIES COMMITTED FOR SALE. 2/ PRELIMINARY. 3/ BASED ON MAY 1976 INDICATIONS. 4/ EXCLUDES SUPPORT PAYMENT. 5/ AVERAGE EARNED ON TOTAL SORGHUM PRODUCED. 6/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 7/ OCTOBER-APRIL 1975/76 AVERAGE. 8/ DISASTER PAYMENTS. * PROJECTED.

TABLE 5.—DAYS: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1970-76

YEAR BEGINNING JULY 1	SUPPLY		DISAPPEARANCE		DOMESTIC USE		EXPORTS		DISAPPEARANCE		ENDING STOCKS JUNE 30		
	BEGINNING	STOCKS	PRODUCTION	IMPORTS	FEED	INDUSTRY; LAND SEED	FOOD,	TOTAL	ANCE	HELD	PRIVATE	GOVT.	TOTAL
	1970/71	499	917	2	1,416	781	102	883	18	901	158	359	517
1971/72	517	881	4	1,402	738	99	837	24	861	169	372	541	
1972/73	541	692	3	1,236	711	93	804	22	826	189	221	410	
1973/74	410	667	2/	1,077	666	98	764	58	822	158	97	255	
1974/75 3/	255	614	2/	869	579	93	672	11	683	130	56	186	
1975/76 4/	186	657	2/	843	550	95	645	15	660			183	
1976/77 *	183	655	2/	838	555	95	650	20	670			168	
		(+,-50)	(+,-50)	(+,-15)	(+,-15)	(+,-15)	(+,-15)	(+,-15)	(+,-15)			(+,-15)	
ACREAGE													
ACREAGE													
BASE OR ALLOTMENT:	SET- ASIDE 5/	VESTED FOR GRAIN	HAR- VESTED FOR GRAIN	PLANTED BY FARMERS	PER ACRE	RECEIVED BY FARMERS	NO. 2 6/	MINNEAPOLIS/PORTLANDS NO. 2 EXTRA HEAVY	CHICAGO NO. 2 WHITE, HEAVY	NATIONAL NO. 2 WHITE, HEAVY	SUPPORT PAYMENTS TO LOAN RATE: 5/	PRICE SUPPORT OPERATIONS	
1970/71	—	—	24.5	18.6	49.2	.62	.69	.80	.77	.63	---	---	
1971/72	—	—	22.0	15.8	55.9	.60	.66	.84	.73	.54	---	---	
1972/73	—	—	20.2	13.5	51.2	.72	.82	1.04	.90	.54	---	---	
1973/74	—	—	19.1	14.1	47.4	1.18	1.34	1.61	1.44	.54	---	---	
1974/75 3/	—	—	18.0	13.2	46.5	1.53	1.69	1.89	1.75	.54	---	---	
1975/76 4/	—	—	17.4	13.6	48.1	1.44	1.66	1.83	1.78	1.54	7/	54	---
1976/77 *	—	—	16.8	12.6	52.0	(+,-6)	(+,-6)	(+,-6)	(+,-6)	.60			
MILLION ACRES													
MILLION ACRES													
1970/71	—	—	—	—	—	—	—	—	—	—	—	—	—
1971/72	—	—	—	—	—	—	—	—	—	—	—	—	—
1972/73	—	—	—	—	—	—	—	—	—	—	—	—	—
1973/74	—	—	—	—	—	—	—	—	—	—	—	—	—
1974/75 3/	—	—	—	—	—	—	—	—	—	—	—	—	—
1975/76 4/	—	—	—	—	—	—	—	—	—	—	—	—	—
1976/77 *	—	—	—	—	—	—	—	—	—	—	—	—	—
MILLION BUSHELS													
MILLION BUSHELS													
1970/71	—	—	—	—	—	—	—	—	—	—	—	—	—
1971/72	—	—	—	—	—	—	—	—	—	—	—	—	—
1972/73	—	—	—	—	—	—	—	—	—	—	—	—	—
1973/74	—	—	—	—	—	—	—	—	—	—	—	—	—
1974/75 3/	—	—	—	—	—	—	—	—	—	—	—	—	—
1975/76 4/	—	—	—	—	—	—	—	—	—	—	—	—	—
1976/77 *	—	—	—	—	—	—	—	—	—	—	—	—	—
DOLLARS PER BUSHEL													
MILLION DOLLARS													

1/ UNDER LOAN TO OR OWNED BY CCCS FOR YEARS PRIOR TO 1973 CCCS INVENTORY DOES NOT INCLUDE QUANTITIES COMMITTED FOR SALE. 2/ LESS THAN 500,000 BUSHELS. 3/ PRELIMINARY. 4/ BASED ON MAY 1976 INDICATIONS. 5/ NOT INCLUDED IN THE PROGRAM. 6/ EXCLUDES SUPPORT PAYMENT. 7/ JULY-APRIL 1975/76 AVERAGE. 8/ 'HEAVY' ONLY BEGINNING OCTOBER 1975. * PROJECTED.

TABLE 6.—BARLEY: MARKETING YEAR SUPPLY, DISAPPEARANCE, ACREAGE AND PRICES, 1970-76

YEAR BEGINNING JULY 1	SUPPLY		DISAPPEARANCE		ENDING STOCKS JUNE 30							
	: BEGINNING: : STOCKS		: DOMESTIC USE		: PRIVATELY: : GOVT.							
	PRODUCTION:	IMPORTS:	FOOD, FEED : INDUSTRY: : AND SEEDS	EXPORTS: TOTAL	DIAPPEAR- ANCE	HELD						
MILLION BUSHELS												
1970/71	236	416	9	661	289	139	428	78	506	.65	90	155
1971/72	155	464	15	634	266	142	408	51	459	96	79	175
1972/73	175	423	14	612	238	145	383	66	449	113	50	163
1973/74	163	422	9	594	237	150	367	88	475	115	4	119
1974/75 2/	119	304	20	443	178	150	328	40	368	75	0	75
1975/76 3/	75	383	20	478	187	153	340	30	370			108
1976/77 *	108	370	10	488	182	158	340	40	380			108
				(+,-15)	(+,-10)		(+,-10)		(+,-10)			(+,-10)
ACREAGE							YIELD		SEASONAL PRICES		GOVT.	PRICE SUPPORT OPERATIONS
MILLION ACRES												
HAR- VESTED							RECEIVED:		MINNEAPOLIS			
BASE OR SET- ASIDE	PLANTED:	FUR-	PER	HARVESTED:	BY	3 OR BETTER*	NO. 3	MINNEAPOLIS	FRESNO	INTERNATIONAL	SUPPORT PAYMENTS	
ALLUREMENT:	GRAN-	ACRE		FARMERS:			NO. 2			NO. 2	AVG.	
				2 4/	FEED	FEEDING	WESTERN			LOAN RATE:	6/	
							5/			FEED		
MILLION BUSHELS							DOLLARS		PER BUSHEL			MILLION DOLLARS
1970/71	16.0	3.9	40.5	9.7	42.6	.97	1.11	1.18	1.43	.83	.06	45
1971/72	18.0	0	11.1	10.2	45.7	.99	1.04	1.13	1.50	.86	0	0
1972/73	18.0	4.9	30.6	9.7	43.6	1.21	1.21	1.44	1.72	.86	0	107
1973/74	17.3	1.4	11.2	10.5	40.3	2.13	2.10	2.75	2.74	.86	0	78
1974/75 2/	7/	0	9.0	8.2	37.2	2.80	2.52	4.07	3.14	.90	0	16.9/
1975/76 3/	7/	0	9.5	8.7	46.0	2.43	2.43	3.32	8/	2.85	8/	5.9/
1976/77 *	7/	0	9.2	8.4	44.0	(+,-10)						1.02

1/ UNDER LOAN TO OR OWNED BY CCC; FOR YEARS PRIOR TO 1973 CCC'S INVENTORY DOES NOT INCLUDE QUANTITIES COMMITTED FOR SALE; IN 1975 THE INVENTORY WAS LESS THAN 500,000 BUSHELS. 2/ PRELIMINARY. 3/ BASED IN MAY 1976 INDICATIONS. 4/ AVERAGE EARNED ON TOTAL BARLEY PRODUCED. 5/ 00 TO 70% PLUMP OR BETTER. 6/ AVERAGE EARNED ON TOTAL FEED GRAINS ONLY. 7/ AVAILABLE FOR TOTAL FEED GRAINS ONLY. 8/ APRIL, 1975/76 AVERAGE. 9/ DISASTER PAYMENTS. * PROJECTED.

Table 7.--Corn: Marketing year supply and disappearance, specified periods, 1965-76
(Adjusted for July 1 to June 1 shift in grain stocks reporting)

Year and periods beginning Oct. 1	Supply			Disappearance					Ending stocks	
	Beginning stocks	Production	Imports	Total	Domestic use		Exports	Total disappear- ance		
					Food	Industry				
					Feed	and seed 1/				
----- Million bushels -----										
1965/66										
Oct.-Dec.	1,147	4,103	2/	5,250	914	86	1,000	197	1,197 4,053	
Jan.-Mar.	4,053	---	2/	4,053	926	86	1,012	171	1,183 2,870	
Apr.-May	2,870	---	2/	2,870	526	67	593	121	714 2,156	
June-Sept.	2,156	---	2/	2,156	995	120	1,115	199	1,314 842	
Mktg. year*	1,147	4,103	1	5,251	3,362	360	3,722	687	4,409 842	
1966/67										
Oct.-Dec.	842	4,167	2/	5,009	1,077	85	1,162	140	1,302 3,707	
Jan.-Mar.	3,707	---	2/	3,707	756	91	847	126	973 2,734	
Apr.-May	2,734	---	2/	2,734	506	68	574	71	645 2,089	
June-Sept.	2,089	---	2/	2,089	993	120	1,113	150	1,263 826	
Mktg. year*	842	4,167	1	5,010	3,333	364	3,697	487	4,184 826	
1967/68										
Oct.-Dec.	826	4,860	2/	5,686	1,096	87	1,183	183	1,366 4,320	
Jan.-Mar.	4,320	---	2/	4,320	829	90	919	158	1,077 3,243	
Apr.-May	3,243	---	2/	3,243	552	68	620	86	706 2,537	
June-Sept.	2,537	---	2/	2,537	1,044	117	1,161	207	1,368 1,169	
Mktg. year*	826	4,860	1	5,687	3,523	362	3,885	633	4,518 1,169	
1968/69										
Oct.-Dec.	1,169	4,450	2/	5,619	1,106	86	1,192	158	1,350 4,269	
Jan.-Mar.	4,269	---	2/	4,269	1,046	90	1,136	71	1,207 3,062	
Apr.-May	3,062	---	2/	3,062	497	66	563	88	651 2,411	
June-Sept.	2,411	---	2/	2,411	958	117	1,075	218	1,293 1,118	
Mktg. year*	1,169	4,450	1	5,620	3,607	359	3,966	536	4,502 1,118	
1969/70										
Oct.-Dec.	1,118	4,687	2/	5,805	1,149	87	1,236	186	1,422 4,383	
Jan.-Mar.	4,383	---	2/	4,383	1,122	91	1,213	139	1,352 3,031	
Apr.-May	3,031	---	2/	3,031	559	68	627	92	719 2,312	
June-Sept.	2,312	---	1	2,313	995	119	1,114	194	1,308 1,005	
Mktg. year*	1,118	4,687	1	5,806	3,824	365	4,189	612	4,801 1,005	
1970/71										
Oct.-Dec.	1,005	4,152	2	5,159	1,144	91	1,235	156	1,391 3,768	
Jan.-Mar.	3,768	---	1	3,769	1,009	94	1,103	121	1,224 2,545	
Apr.-May	2,545	---	1	2,546	504	71	575	65	640 1,906	
June-Sept.	1,906	---	2/	1,906	935	129	1,064	175	1,239 667	
Mktg. year*	1,005	4,152	4	5,161	3,592	385	3,977	517	4,494 667	

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Table 7.--Corn: Marketing year supply and disappearance, specified periods, 1965-76--continued
(Adjusted for July 1 to June 1 shift in grain stocks reporting)

Year and periods beginning Oct. 1	Supply				Disappearance				Ending stocks	
	Beginning stocks	Production	Imports	Total	Domestic use		Exports	disappear- ance		
					Food	Industry				
					Feed	Total				
- - - Million bushels - - -										
1971/72										
Oct.-Dec.	667	5,641	2/	6,308	1,355	93	1,448	160	1,603	
Jan.-Mar.	4,700	---	1	4,701	1,050	97	1,147	173	1,320	
Apr.-May	3,381	---	2/	3,381	592	73	665	126	791	
June-Sept.	2,590	---	2/	2,590	1,000	127	1,127	337	1,464	
Mktg. year*	667	5,641	1	6,309	3,997	390	4,387	796	5,183	
									1,126	
1972/73										
Oct.-Dec.	1,126	5,573	1	6,700	1,512	100	1,612	257	1,869	
Jan.-Mar.	4,831	---	2/	4,831	1,082	107	1,189	302	1,491	
Apr.-May	3,340	---	2/	3,340	634	81	715	186	901	
June-Sept.	2,439	---	2/	2,439	1,075	141	1,216	514	1,730	
Mktg. year*	1,126	5,573	1	6,700	4,304	429	4,733	1,258	5,991	
									709	
1973/74										
Oct.-Dec.	709	5,647	1	6,357	1,458	106	1,564	320	1,884	
Jan.-Mar.	4,473	---	2/	4,473	1,162	112	1,274	338	1,612	
Apr.-May	2,861	---	2/	2,861	639	84	723	243	966	
June-Sept.	1,895	---	2/	1,895	924	146	1,070	342	1,412	
Mktg. year*	709	5,647	1	6,357	4,183	448	4,631	1,243	5,874	
									483	
1974/75 3/										
Oct.-Dec.	483	4,664	2/	5,147	1,148	106	1,254	272	1,526	
Jan.-Mar.	3,621	---	1	3,622	918	111	1,029	379	1,408	
Apr.-May	2,214	---	1	2,215	458	86	544	179	723	
June-Sept.	1,492	---	2/	1,492	667	147	814	319	1,133	
Mktg. year*	483	4,664	2	5,149	3,191	450	3,641	1,149	4,790	
									359	
1975/76 3/										
Oct.-Dec.	359	5,767	1	6,127	1,136	106	1,242	454	1,696	
Jan.-Mar.	4,431	---	1	4,432	1,097	117	1,214	406	1,620	
Apr.-May									2,812	
June-Sept.										
Mktg. year*	359	5,767	1	6,127						
4/										

1/ Food and industry revised 1967/68-1971/72 on basis of 1972 Census of Manufactures.

2/ Less than 500,000 bushels.

3/ Preliminary.

4/ Forecast.

* Data may not add to totals due to independent rounding.

Table 8.--Sorghum: Marketing year supply and disappearance, specified periods, 1965-75
(Adjusted for July 1 to June 1 shift in grain stocks reporting)

Year and periods beginning Oct. 1	Supply					Disappearance					Ending stocks	
	Beginning stocks	Production	Imports	Total	Domestic use			Total	Exports	disappear- ance		
					Food	Feed	industry					
					and seed							
----- Million bushels -----												
1965/66												
Oct.-Dec.	566	673	---	1,239	208	3	211	50	261	978		
Jan.-Mar.	978	---	---	978	178	3	181	73	254	724		
Apr.-May	724	---	---	724	80	3	83	43	126	598		
June-Sept.	598	---	---	598	102	5	107	100	207	391		
Mktg. year*	566	673	---	1,239	569	13	582	266	848	391		
1966/67												
Oct.-Dec.	391	715	---	1,106	207	3	210	75	285	821		
Jan.-Mar.	821	---	---	821	227	3	230	65	295	526		
Apr.-May	526	---	---	526	83	3	86	45	131	395		
June-Sept.	395	---	---	395	82	5	87	64	151	244		
Mktg. year*	391	715	---	1,106	601	13	614	248	862	244		
1967/68												
Oct.-Dec.	244	755	---	999	209	3	212	55	267	732		
Jan.-Mar.	732	---	---	732	164	3	167	48	215	517		
Apr.-May	517	---	---	517	84	3	87	16	103	414		
June-Sept.	414	---	---	414	73	5	78	47	125	289		
Mktg. year*	244	755	---	999	531	13	544	166	710	289		
1968/69												
Oct.-Dec.	289	731	---	1,020	248	3	251	28	279	741		
Jan.-Mar.	741	---	---	741	181	3	184	16	200	541		
Apr.-May	541	---	---	541	89	3	92	13	105	436		
June-Sept.	436	---	---	436	95	5	100	49	149	287		
Mktg. year*	289	731	---	1,020	614	13	627	106	733	287		
1969/70												
Oct.-Dec.	287	730	---	1,017	297	3	300	29	329	688		
Jan.-Mar.	688	---	---	688	151	1	152	33	185	503		
Apr.-May	503	---	---	503	91	2	93	11	104	399		
June-Sept.	399	---	---	399	99	3	102	53	155	244		
Mktg. year*	287	730	---	1,017	638	9	647	126	773	244		
1970/71												
Oct.-Dec.	244	684	---	928	264	2	266	51	317	611		
Jan.-Mar.	611	---	---	611	202	1	203	52	255	356		
Apr.-May	356	---	---	356	106	3	109	9	118	238		
June-Sept.	238	---	---	238	114	3	117	31	148	90		
Mktg. year*	244	684	---	928	684	10	694	144	838	90		

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Table 8 --Sorghum: Marketing year supply and disappearance, specified periods, 1965-75--continued
(Adjusted for July 1 to June 1 shift in grain stocks reporting)

Year and periods beginning Oct. 1	Supply				Disappearance					Ending stocks	
	Beginning stocks	Production	Imports	Total	Domestic use			Total	Exports		
					Food	Feed	industry				
					and seed	Total	Exports				
----- Million bushels -----											
1971/72											
Oct.-Dec.	90	876	---	966	236	2	238	19	257	709	
Jan.-Mar.	709	---	---	709	197	2	199	30	229	480	
Apr.-May	480	---	---	480	113	2	115	17	132	348	
June-Sept.	348	---	---	348	145	3	148	58	206	142	
Mktg. year*	90	876	---	966	692	9	701	123	824	142	
1972/73											
Oct.-Dec.	142	809	---	951	282	1	283	47	330	621	
Jan.-Mar.	621	---	---	621	199	1	200	58	258	363	
Apr.-May	363	---	---	363	80	2	82	28	110	253	
June-Sept.	253	---	---	253	99	2	101	79	180	73	
Mktg. year*	142	809	---	951	660	6	666	212	878	73	
1973/74											
Oct.-Dec.	73	930	---	1,003	301	1	302	56	358	645	
Jan.-Mar.	645	---	---	645	197	1	198	66	264	381	
Apr.-May	381	---	---	381	99	2	101	35	136	245	
June-Sept.	245	---	---	245	104	3	107	77	184	61	
Mktg. year*	73	930	---	1,003	701	7	708	234	942	61	
1974/75 <u>1/</u>											
Oct.-Dec.	61	629	---	690	262	1	263	46	309	381	
Jan.-Mar.	381	---	---	381	108	1	109	63	172	209	
Apr.-May	209	---	---	209	59	2	61	17	78	131	
June-Sept.	131	---	---	131	8	2	10	86	96	35	
Mktg. year*	61	629	---	690	437	6	443	212	655	35	
1975/76 <u>1/</u>											
Oct.-Dec.	35	758	---	793	255	1	256	63	319	474	
Jan.-Mar.	474	---	---	474	157	1	158	68	226	248	
Mktg. year*	35	758	---	793							
<u>2/</u>											

1/ Preliminary.

2/ Forecast.

* Data may not add to totals due to independent rounding.

Table 9.--Oats: Marketing year supply and disappearance 1965-75
(Adjusted to new June - May marketing year)

Year and periods beginning June 1	Supply			Disappearance					Ending stocks								
	Beginning stocks	Production	Imports	Total	Domestic use		Exports	Total disappear- ance									
					Food	Feed											
					industry	and seed 1/											
----- Million bushels -----																	
1965/66																	
June-Sept.	325	930	1	1,256	307	18	325	10	335								
Oct.-Dec.	921	---	1	922	130	14	144	14	158								
Jan.-Mar.	764	---	1	765	204	23	127	2	229								
Apr.-May	536	---	1	537	101	49	150	9	159								
Mktg. year*	325	930	4	1,259	742	105	847	34	881								
1966/67																	
June-Sept.	378	803	1	1,182	317	17	334	13	347								
Oct.-Dec.	835	---	1	836	152	14	166	7	173								
Jan.-Mar.	663	---	1	664	198	22	220	1	221								
Apr.-May	443	---	1	444	82	44	126	1	127								
Mktg. year*	378	803	4	1,185	749	97	846	22	868								
1967/68																	
June-Sept.	317	794	1	1,112	302	17	319	7	326								
Oct.-Dec.	786	---	1	787	116	14	130	1	131								
Jan.-Mar.	656	---	1	657	187	22	209	1	210								
Apr.-May	447	---	2/	447	81	48	129	2	131								
Mktg. year*	317	794	3	1,114	686	101	787	11	798								
1968/69																	
June-Sept.	316	951	2/	1,267	300	17	317	4	321								
Oct.-Dec.	946	---	2/	946	138	14	152	2	154								
Jan.-Mar.	792	---	1	793	213	22	235	1	236								
Apr.-May	557	---	2/	557	83	48	131	2	133								
Mktg. year*	316	951	2	1,269	736	101	837	8	845								
1969/70																	
June-Sept.	424	966	1	1,391	331	17	348	2	350								
Oct.-Dec.	1,041	---	2/	1,041	126	14	140	1	141								
Jan.-Mar.	900	---	1	901	191	23	214	1	215								
Apr.-May	686	---	2/	686	87	50	137	1	138								
Mktg. year*	424	966	2	1,392	735	104	839	5	844								
1970/71																	
June-Sept.	548	917	2/	1,465	340	17	357	3	360								
Oct.-Dec.	1,105	---	2/	1,105	156	13	169	14	183								
Jan.-Mar.	922	---	2/	922	191	21	212	1	213								
Apr.-May	709	---	2/	709	91	46	137	1	138								
Mktg. year*	548	917	1	1,466	779	97	876	19	895								

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Table 9.--Oats: Marketing year supply and disappearance 1965-75--continued
(Adjusted to new June - May marketing year)

Year and periods beginning June 1	Supply				Disappearance				Ending stocks								
	Beginning stocks	Production	Exports	Total	Domestic use		Total Exports	disappear- ance									
					Food	Feed											
					industry	and seed 1/											
- - - - - Million bushels - - - - -																	
1971/72																	
June-Sept.	571	881	2/	1,452	341	17	358	1	359								
Oct.-Dec.	1,093	---	2/	1,093	134	13	147	3	150								
Jan.-Mar.	943	---	1	944	176	21	197	11	208								
Apr.-May	736	---	2	738	93	43	136	5	141								
Mktg. year*	571	881	3	1,455	742	95	837	21	858								
1972/73																	
June-Sept.	597	692	2	1,291	339	17	356	7	363								
Oct.-Dec.	928	---	1	929	138	13	151	2	153								
Jan.-Mar.	776	---	1	777	171	20	191	2	193								
Apr.-May	584	---	2/	584	74	40	114	9	123								
Mktg. year*	597	692	3	1,292	722	90	812	19	831								
1973/74																	
June-Sept.	461	667	2/	1,128	281	16	297	23	320								
Oct.-Dec.	808	---	2/	808	139	13	152	19	171								
Jan.-Mar.	637	---	2/	637	180	20	200	1	201								
Apr.-May	436	---	2/	436	76	39	115	13	128								
Mktg. year*	461	667	2/	1,128	675	88	763	57	820								
1974/75 3/																	
June-Sept.	308	614	2/	922	248	15	263	12	275								
Oct.-Dec.	647	---	2/	647	124	12	136	4	140								
Jan.-Mar.	507	---	2/	507	161	19	180	1	181								
Apr.-May	326	---	2/	326	61	38	99	3	102								
Mktg. year*	308	614	2/	922	595	84	679	19	698								
1975/76 3/																	
June-Sept.	224	657	2/	881	239	13	252	2	254								
Oct.-Dec.	627	---	2/	627	105	13	118	8	126								
Jan.-Mar.	501	---	2/	501	160	20	180	1	181								
Apr.-May	4/	657	2/	881													

1/ Food and industry revised 1967/68-1971/72 on basis of 1972 Census of manufactures.

2/ Less than 500,000 bushels.

3/ Preliminary.

4/ Forecast.

* Data may not add to totals due to independent rounding.

Table 10.--Barley: Marketing year supply and disappearance, specified periods, 1965-75
(Adjusted to new June - May marketing year)

Year and periods beginning June 1	Supply				Disappearance					Ending stocks	
	Beginning stocks	Production	Imports	Total	Domestic use		Food	Feed	Industry		
					Exports	1/					
					and seed	2/					
<u>Million bushels</u>											
1965/66											
June-Sept.	133	393	2	528	77	37	114	26	140	388	
Oct.-Dec.	388	---	3	391	43	25	68	22	90	301	
Jan.-Mar.	301	---	1	302	65	29	94	15	109	193	
Apr.-May	193	---	1	194	18	28	46	15	61	133	
Mktg. year*:	133	393	8	534	204	119	323	78	401	133	
1966/67											
June-Sept.	133	392	1	526	65	39	104	35	139	387	
Oct.-Dec.	387	---	4	391	63	25	88	10	98	293	
Jan.-Mar.	293	---	2/	293	50	30	80	7	87	206	
Apr.-May	206	---	1	207	21	30	51	8	59	148	
Mktg. year*:	133	392	7	532	200	124	324	60	384	148	
1967/68											
June-Sept.	148	374	3	525	85	39	124	19	143	382	
Oct.-Dec.	382	---	4	386	49	27	76	7	83	303	
Jan.-Mar.	303	---	1	304	46	31	77	9	86	218	
Apr.-May	218	---	1	219	26	30	56	2	58	161	
Mktg. year*:	148	374	9	531	206	128	334	36	370	161	
1968/69											
June-Sept.	161	426	2	589	87	42	129	3	132	457	
Oct.-Dec.	457	---	5	462	56	28	84	4	88	374	
Jan.-Mar.	374	---	1	375	57	32	89	1	90	285	
Apr.-May	285	---	2	287	28	30	58	4	62	225	
Mktg. year*:	161	426	10	597	229	131	360	12	372	225	
1969/70											
June-Sept.	225	427	3	655	106	43	149	2	151	504	
Oct.-Dec.	504	---	5	509	53	29	82	1	83	426	
Jan.-Mar.	426	---	1	427	63	33	96	1/	96	331	
Apr.-May	331	---	4	335	28	31	59	7	66	269	
Mktg. year*:	225	427	13	665	250	136	386	10	396	269	
1970/71											
June-Sept.	269	416	6	691	126	44	170	31	201	490	
Oct.-Dec.	490	---	2	492	66	29	95	17	112	380	
Jan.-Mar.	380	---	2/	380	67	33	100	23	123	257	
Apr.-May	257	---	1	258	29	32	61	13	74	184	
Mktg. year*:	269	416	10	695	289	138	427	84	511	184	

--continued

Table 10.--Barley: Marketing year supply and disappearance, specified periods, 1965-75--continued
(Adjusted to new June - May marketing year)

Year and periods beginning June 1	Supply				Disappearance				Ending stocks	
	Beginning stocks		Production	Imports	Total	Domestic use		Exports		
	June	Sept.	Oct.	Dec.	Jan.	Mar.	Apr.	May		
	184	464	4	652	111	45	156	7	163	489
1971/72	184	464	4	652	111	45	156	7	163	489
June-Sept.	184	464	4	652	111	45	156	7	163	489
Oct.-Dec.	489	---	5	494	63	29	92	10	102	392
Jan.-Mar.	392	---	1	393	72	34	106	3	109	284
Apr.-May	284	---	3	287	27	31	58	21	79	208
Mktg. year*	184	464	12	660	270	141	411	41	452	208
1972/73	208	423	7	638	115	45	160	24	184	454
June-Sept.	208	423	7	638	115	45	160	24	184	454
Oct.-Dec.	454	---	7	461	57	29	86	13	99	362
Jan.-Mar.	362	---	2/	362	54	34	88	16	104	258
Apr.-May	258	---	3	261	18	33	51	18	69	192
Mktg. year*	208	423	17	648	244	142	386	70	456	192
1973/74	192	422	3	617	111	46	157	38	195	422
June-Sept.	192	422	3	617	111	46	157	38	195	422
Oct.-Dec.	422	---	4	426	50	32	82	23	105	321
Jan.-Mar.	321	---	1	322	54	35	89	18	107	215
Apr.-May	215	---	1	216	24	32	56	14	70	146
Mktg. year*	192	422	9	623	239	145	384	93	477	146
1974/75 3/	146	304	8	458	93	51	144	11	155	303
June-Sept.	146	304	8	458	93	51	144	11	155	303
Oct.-Dec.	303	---	6	309	36	31	67	14	81	228
Jan.-Mar.	228	---	3	231	51	34	85	12	97	134
Apr.-May	134	---	4	138	9	32	41	5	46	92
Mktg. year*	146	304	20	470	187	149	336	42	378	92
1975/76 3/	92	383	7	482	97	39	136	4	140	342
June-Sept.	92	383	7	482	97	39	136	4	140	342
Oct.-Dec.	342	---	5	347	28	32	60	10	70	277
Jan.-Mar.	277	---	3	280	57	35	92	4	96	184
Mktg. year*	92	383	18	493						
4/										

1/ Food and industry revised 1967/68-1971/72 on basis of 1972 Census of Manufactures.

2/ Less than 500,000 bushels.

3/ Preliminary.

4/ Forecast.

* Data may not add to totals due to independent rounding.

Table 11.--Consumption of harvested feed, by kind of livestock, 1970-75

Year beginning Oct. 1	Concentrates						Roughages		
	Corn 1/	Sorghum	Other grains 2/	High protein 3/	Other byproduct feeds* 4/	Total	Hay	Other harvested forage 5/	
1,000 tons									
ALL LIVESTOCK									
1970	102,757	19,141	26,522	20,577	13,177	182,174	128,871	119,723	
1971	114,342	19,377	27,377	20,407	13,110	194,613	125,819	139,922	
1972	123,257	18,468	21,610	19,244	13,683	196,262	129,800	138,635	
1973	119,838	19,648	17,653	20,598	22,632	200,369	133,500	166,047	
1974 6/	90,811	12,200	16,300	19,696	19,078	158,085	125,200	164,348	
1975*	102,487	14,100	19,700	20,825	19,659	176,771	135,000	164,350	
MILK COWS 7/									
1970	12,849	618	4,794	2,417	3,624	24,302	34,968	63,350	
1971	13,829	706	4,784	2,444	3,795	25,558	34,586	74,621	
1972	14,287	487	3,826	2,263	3,956	24,819	33,744	72,591	
1973	15,032	604	3,710	1,339	4,778	25,463	34,539	63,181	
1974 6/	14,300	589	4,171	2,173	4,781	26,014	32,392	62,237	
1975*	14,655	674	4,608	2,320	5,089	27,346	34,927	62,214	
OTHER DAIRY CATTLE 7/									
1970	594	192	488	169	312	1,755	7,225	2,985	
1971	750	195	396	164	294	1,799	7,250	3,614	
1972	681	169	393	120	324	1,687	7,654	3,497	
1973	750	169	367	63	526	1,875	7,622	8,388	
1974 6/	789	120	283	38	359	1,589	7,148	8,231	
1975*	717	137	301	41	387	1,583	7,708	8,231	
CATTLE ON FEED									
1970	18,261	11,866	8,125	1,663	2,141	42,056	21,277	22,351	
1971	22,305	12,072	9,002	1,423	1,992	46,794	21,218	25,534	
1972	24,882	11,750	5,396	1,479	2,116	45,623	22,740	26,024	
1973	22,810	9,761	3,009	1,059	3,283	39,922	18,831	32,557	
1974 6/	14,317	6,694	2,950	1,069	2,334	27,364	17,660	32,971	
1975*	19,749	7,732	4,160	1,144	2,560	35,345	19,042	32,971	
OTHER BEEF CATTLE 7/									
1970	5,655	1,097	1,756	1,792	1,542	11,842	58,352	27,591	
1971	6,008	1,107	1,727	1,841	1,630	12,313	55,699	32,392	
1972	7,065	1,028	1,651	1,667	1,612	13,023	58,451	32,917	
1973	8,689	1,194	1,194	731	4,606	16,414	60,001	57,759	
1974 6/	8,027	903	1,040	1,507	3,786	15,263	56,270	57,200	
1975*	6,795	1,034	1,177	1,612	3,896	14,514	60,675	57,234	
SHEEP									
1970	294	75	164	278	---	811	1,149	1,416	
1971	306	73	153	285	---	817	1,159	1,731	
1972	313	69	131	241	---	754	1,160	1,625	
1973	292	75	126	235	404	1,132	1,034	1,374	
1974 6/	242	95	74	156	299	866	970	1,069	
1975*	248	37	82	167	297	831	1,045	1,321	
HENS AND PULLETS									
1970	8,725	1,538	3,267	2,743	1,769	18,042	---	---	
1971	8,767	1,562	3,201	2,817	1,766	18,113	---	---	
1972	9,330	1,502	2,249	2,442	1,907	17,430	---	---	
1973	9,138	1,469	2,110	3,089	2,111	17,917	---	---	
1974 6/	7,827	1,203	2,529	2,576	2,170	16,305	---	---	
1975*	8,104	1,377	3,072	2,710	2,116	17,379	---	---	
CHICKENS RAISED									
1970	1,176	603	886	1,119	209	3,993	---	---	
1971	1,104	530	808	1,159	209	3,810	---	---	
1972	1,202	592	860	1,132	209	3,995	---	---	
1973	1,238	701	568	1,060	246	3,813	---	---	
1974 6/	1,037	406	541	981	239	3,204	---	---	
1975*	863	465	735	1,034	220	3,317	---	---	

Continued

Table 11 .--Consumption of harvested feed, by kind of livestock, 1970-75

Continued

Year beginning	Concentrates						Roughages	
Oct. 1	Corn 1/	Sorghum	Other grains 2/	High protein 3/	Other byproduct feeds 4/	Total	Hay	Other harvested forage 5/
1,000 tons								
BROILERS								
1970	7,346	620	300	3,318	496	12,080	---	---
1971	7,880	661	305	3,172	492	12,510	---	---
1972	8,455	608	314	3,695	383	13,455	---	---
1973	7,498	416	90	3,983	2,562	14,549	---	---
1974 6/	7,063	347	154	4,118	2,370	14,052	---	---
1975*	7,645	397	282	4,329	2,371	15,024	---	---
TURKEYS								
1970	2,430	640	322	1,247	134	4,773	---	---
1971	2,695	560	329	1,350	146	5,080	---	---
1972	2,881	534	176	1,350	141	5,082	---	---
1973	2,801	314	186	1,526	243	5,070	---	---
1974 6/	2,246	196	237	1,106	160	3,945	---	---
1975*	2,194	224	419	1,155	177	4,169	---	---
HOGS								
1970	39,667	1,522	4,234	4,113	1,436	50,972	---	---
1971	39,766	1,334	4,380	3,782	1,268	50,530	---	---
1972	43,315	606	3,251	3,429	1,355	51,956	---	---
1973	40,341	1,107	2,137	6,264	2,187	52,036	---	---
1974 6/	31,714	1,304	956	4,453	1,903	40,330	---	---
1975*	31,188	1,493	1,217	4,716	1,915	40,529	---	---
HORSES AND MULES								
1970	885	43	544	---	112	1,584	3,357	2,030
1971	885	43	544	---	112	1,584	3,357	2,030
1972	885	43	544	---	112	1,584	3,357	1,981
1973	2,073	109	1,274	28	221	3,765	7,854	2,000
1974 6/	1,818	108	2,475	18	129	4,548	7,366	1,754
1975*	873	124	2,555	19	141	3,712	7,943	1,754
OTHER LIVESTOCK								
1970	4,875	327	1,642	1,718	1,402	9,964	2,543	---
1971	5,917	534	1,748	1,970	1,406	11,575	2,550	---
1972	6,530	635	1,602	1,426	1,568	11,761	2,694	---
1973	9,176	3,729	2,882	1,221	1,465	18,473	3,619	790
1974 6/	1,431	235	890	1,501	548	4,605	3,394	625
1975*	627	269	1,022	1,578	490	3,986	3,660	625
UNALLOCATED 8/								
1970	---	---	---	---	---	---	---	---
1971	4,130	---	---	---	---	4,130	---	---
1972	3,431	445	1,195	---	---	5,071	---	---
1973	---	---	---	---	---	---	---	---
1974 6/	---	---	---	---	---	---	---	---
1975*	8,829	137	70	---	---	9,036	---	---

1/ Corn for forage was added to corn fed as grain in these amounts: 1970, 999,000 tons; 1971, 1,322,000 tons; 1972, 1,164,000 tons; 1973, 1,173,000 tons; 1974 1,629,000 tons. In addition, fats fed to livestock were converted to corn equivalent and added to corn.

2/ Includes oats, barley, wheat, and rye.

3/ Includes oilseed meals, animal proteins, and grain proteins.

4/ Includes wheat and rice millfeeds, seeds, skim milk, hominy, and other byproduct feeds and beginning 1973, estimates for urea and salt minerals were included.

5/ Includes straw, silage, and beet pulp.

6/ Preliminary, subject to revision.

7/ In all calculations for the feeding year 1969 to date, cattle numbers used are the new categories shown in the Livestock and Poultry Inventory, SRS, USDA.

8/ Probably includes some waste and other losses.

*Projected.

Table 12 .--U.S. corn exports, to selected countries, 1971-75
(Grain only)

Country	Year beginning October											
	1971/72	1972/73	1973/74	1974/75	Oct.-Mar.	1974/75 : 1975/76						
	--- Million bushels ---											
<u>Traditional countries importing U.S. corn</u>												
<u>Large Imports--"usually"</u>												
Japan	111	252	251	206	88	91						
Netherlands	103	149	137	154	98	72						
Italy	91	113	85	107	56	30						
Germany, West	56	82	122	115	70	106						
United Kingdom	54	65	38	27	19	22						
Spain	38	69	101	104	61	38						
Mexico	1	35	48	48	32	28						
Canada	10	1/31	51	37	13	12						
Total	464	796	833	798	437	399						
<u>Medium Imports--"usually"</u>												
Korea	17	17	15	14	11	11						
Belgium-Luxembourg	15	17	5	13	9	12						
Germany, East	12	---	6	2/	2/	1						
Egypt	5	6	16	19	11	7						
Poland	11	24	19	28	15	44						
Greece	7	22	35	20	15	14						
Portugal	18	19	22	41	24	20						
Romania	7	3	8	30	19	1						
Republic of China (Taiwan)	9	23	12	16	4	15						
Total	101	131	138	181	108	125						
<u>Small Imports--"usually"</u>												
Israel	3	6	7	9	5	6						
Norway	2	4	3	3	2	3						
Yugoslavia	16	2	2	---	---	---						
France	2/	1	2/	2	2	1						
Lebanon	5	3	3	6	3	1						
Czechoslovakia	3	1	1	0	0	1						
El Salvador	---	3	2/	1	1	2/						
India	1	2/	2/	0	0	0						
Surinam	---	1	1	1	2/	2/						
Canary Islands	4	4	3	4	1	2						
Philippines	6	2	4	2	2/	1						
Costa Rica	---	2	2	2/	2/	---						
Tanzania	4	2/	4	9	5	2/						
Iran	1	5	2	4	4	1						
Chile	8	6	5	2	2	0						
Dominican Republic	---	1	2	1	2/	1						
Switzerland	---	2/	1	2	1	1						
Total	53	41	40	46	26	18						
<u>New countries importing U.S. corn</u>												
USSR	136	132	129	40	27	235						
China, People's Republic of	0	49	59	0	0	0						
Total	136	181	188	40	27	235						
<u>Other</u>												
	32	93	27	60	38	72						
Grand Total	786	1,242	1,226	1,125	636	849						

1/ For consumption within the country February and March 1973 imports estimated.

2/ Less than 500,000 bushels.

Table 13.--Argentine and Republic of South Africa feed grains:
Acreage, yield, supply and disappearance 1971-76

Marketing year	Acreage	Yield	Supply			Disappearance		
	harvested for grain	per acre	Beginning stocks 1/	Production	Total	Domestic	Export	Total
	Mil. acres	Bushels	Million bushels					
ARGENTINA-CORN								
Apr.-Mar.								
1971	10.0	39.1	1	391	392	134	253	387
1972	7.8	29.6	5	231	236	155	80	235
1973	8.8	40.2	21	354	375	153	199	352
1974	8.6	45.3	23	390	413	182	213	395
1975 2/	7.6	39.8	18	303	321	173	138	311
1976 3/	6.9	33.0	10	228	238	157	79	236
ARGENTINA-SORGHUM								
Apr.-Mar.								
1971	5.5	33.3	0	183	183	85	96	181
1972	3.5	26.6	2	93	95	73	22	95
1973	5.3	34.1	11	181	192	88	95	183
1974	5.7	40.7	9	232	241	121	112	233
1975 2/	4.8	39.6	8	190	198	98	98	196
1976 3/	4.8	36.8	2	177	179	79	98	177
REPUBLIC OF SOUTH AFRICA-CORN								
May-Apr.								
1971	10.8	31.4	30	339	4/370	204	101	305
1972	11.3	33.0	63	373	436	217	140	357
1973	8.9	18.4	79	164	243	219	6	225
1974	11.0	39.7	18	437	455	251	126	377
1975 2/	10.9	33.0	78	360	438	248	128	376
1976 3/	11.2	27.4	62	307	369	248	107	355

1/ Unofficial estimates. 2/ Preliminary. 3/ Projected. 4/ Includes imports.

Grain and Feed Division, Foreign Agricultural Service, USDA.

Table 14.--Corn exports (grain only)
(Year beginning October)

Destination	1973/74	1974/75 (Prel.)	1975/76			
			Exported Oct.-Mar.	Apr.-Sept. 1976	Season Commitments	Season as of April 1
			1975/76	Bookings 1/		
Million bushels						
European Community	363	423	242	41	283	
Other West Europe	157	181	93	22	115	
East Europe	36	38	52	27	79	
USSR	116	62	235	81	316	
Japan	251	208	92	80	172	
Republic of China (Taiwan)	12	16	15	6	21	
Peoples Republic of China	58	---	---	---	---	
India	---	---	---	---	---	
Other Asia	33	36	21	9	30	
Africa	29	35	16	1	17	
Western Hemisphere	110	117	59	11	70	
Subtotal	1,165	1,116	825	278	1,103	
Other 2/	58	20	29	50	79	
Grand Total	1,223	1,136	854	328	3/1,182	

1/ Based on undelivered reported sales; subject to modification, deferral or cancellation by mutual agreement of buyer-seller.
2/ Unidentified destinations. 3/ USDA projection of 1.6 billion bushels for the season suggests that there will be substantially more exports during April-September than indicated by commitments at mid-year.

Table 15.--Summary of 1975 and 1976 feed grain and wheat program provisions

Item	1975	1976
Allotment (Mil. acres)		
Feed Grains	89.0	89.0
Wheat	53.5	61.6
Target Prices (Guaranteed payment made on production from allotment if 5-month weighted average market price falls below target)		
Corn (Dol. per bu.)	1.38	1.57
Sorghum " " "	1.31	1.49
Barley " " "	1.13	1.28
Oats " " "	0	0
Wheat " " "	2.05	2.29
Program Yields (For figuring farm production if target payments are required)		
Corn (Bu. per acre)	93.0	93.0
Sorghum " " "	60.0	55.0
Barley " " "	45.5	44.0
Wheat " " "	32.8	33.1
National Average Loan Rates (All U.S. production eligible)		
Corn (Dol. per bu.)	1.10	1.25
Sorghum " " "	1.05	1.19
Barley " " "	.90	1.02
Oats " " "	.54	.60
Wheat " " "	1.37	1.50
Rye " " "	.89	1.00
Loans:		
Application Period	Until March 31 for wheat, barley, and oats; May 31 for corn and sorghum	Same as 1975
Maturity Dates		
Corn		
Sorghum		
Barley	On last day of 11th month following month	Same as 1975
Oats	in which loan was made or on demand	
Wheat		
Rye		
Interest Rates	6 1/8% per annum (subject to adjustment on October 1)	7 1/2% per annum for the period April 1, 1976 to March 31, 1977
Minimum CCC Resale Prices		
Corn (Dol. per bu.)	1.59	1.81
Sorghum " " "	1.51	1.71
Barley " " "	1.30	1.47
Oats " " "	.78	.87
Wheat " " "	2.36	2.63
Rye " " "	1.28	1.45
Other Major Provisions		
Soybean loan rate (Dol. per bu.)	None	2.50
Set-aside requirements	None	None
Conserving base requirement	None	None
Planting limitations	None	None
Disaster Payments	On allotment acreage: 1/3 of target price if prevented by weather from planting, or if production is 1/3 or more below normal.	Same as 1975
Maintaining Allotments	Planting of other crops may be used to preserve allotments.	Same as 1975
Payment Limitations	\$20,000 maximum per person; resource adjustment payments excluded.	Same as 1975

Table 16.--Corn, No. 2 Yellow, Chicago: Daily closing cash and December 1976 futures 1/
(Dollars per bushel)

Date	December		January		February		March		April		May	
	Cash	Dec. '76	Date	Cash	Dec. '76	Date	Cash	Dec. '76	Date	Cash	Dec. '76	Date
1	2.67	2.69	1		HOLIDAY	2	2.66	2.69	1	2.73	2.76	1
2	2.72	2.69	2	2.54	2.62	3	2.68	2.68	2	2.69	2.69	2
3	2.72	2.68	5	2.58	2.62	4	2.68	2.67	3	2.69	2.71	5
4	2.72	2.73	6	2.58	2.64	5	2.68	2.66	4	2.71	2.72	6
5	2.68	2.69	7	2.63	2.69	6	2.69	2.67	5	2.72	2.72	7
8	2.58	2.65	8	2.64	2.70	9	2.69	2.66	8	2.71	2.69	8
9	2.58	2.68	9	2.61	2.67	10	2.71	2.69	9	2.71	2.71	9
10	2.56	2.70	12	2.66	2.70	11	2.70	2.69	10	2.72	2.70	12
11	2.55	2.66	13	2.67	2.70	12	2.72	2.76	11	2.71	2.67	13
12	2.48	2.60	14	2.66	2.70	13	2.70	2.74	12	2.70	2.66	14
15	2.46	2.58	15	2.66	2.69	16		HOLIDAY	15	2.69	2.63	15
16	2.52	2.61	16	2.67	2.70	17	2.71	2.75	16	2.66	2.62	16
17	2.56	2.65	19	2.67	2.71	18	2.68	2.73	17	2.66	2.65	19
18	2.56	2.63	20	2.68	2.71	19	2.69	2.74	18	2.71	2.66	20
19	2.60	2.65	21	2.65	2.68	20	2.68	2.75	19	2.70	2.65	21
22	2.59	2.66	22	2.63	2.67	23	2.69	2.73	22	2.71	2.66	22
23	2.57	2.63	23	2.66	2.69	24	2.70	2.72	23	2.66	2.63	23
24	2.56	2.62	26	2.49	2.59	25	2.69	2.75	24	2.65	2.64	26
25		HOLIDAY	27	2.55	2.63	26	2.68	2.74	25	2.64	2.63	27
26		HOLIDAY	28	2.57	2.64	27	2.74	2.77	26	2.63	2.63	28
29	2.54	2.60	29	2.58	2.65				29	2.63	2.61	29
30	2.54	2.60	30	2.62	---				30	2.65	2.63	30
31	2.56	2.64							31	2.64		

1/ Continued from February 1976 Feed Situation, FdS-260

Table 17.--Cash prices at principal markets, 1971-76

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Simple average
beginning October	:												
<u>Dollars</u>													
<u>CORN, No. 2 Yellow, Chicago (per bushel)</u>													
1971	1.10	1.07	1.22	1.22	1.21	1.22	1.26	1.28	1.25	1.29	1.29	1.40	1.23
1972	1.32	1.33	1.57	1.58	1.59	1.59	1.65	2.01	2.42	2.52	2.91	2.47	1.91
1973	2.37	2.50	2.68	2.90	3.13	2.99	2.69	2.70	2.93	3.35	3.63	3.55	2.95
1974	3.74	3.48	3.47	3.19	2.96	2.90	2.96	2.82	2.89	2.95	3.12	2.99	3.12
1975	2.74	2.59	2.59	2.62	2.70	2.68	2.68						
<u>CORN, No. 2 Yellow, Omaha (per bushel)</u>													
1971	1.14	1.15	1.24	1.25	1.23	1.23	1.25	1.27	1.23	1.24	1.21	1.28	1.23
1972	1.28	1.34	1.49	1.50	1.55	1.49	1.51	1.84	2.25	2.32	2.71	2.37	1.80
1973	2.34	2.40	2.49	2.71	2.95	2.76	2.49	2.51	2.68	3.19	3.55	3.46	2.79
1974	3.63	3.46	3.36	3.07	2.79	2.75	2.85	2.81	2.84	2.92	3.12	2.95	3.05
1975	2.75	2.55	2.56	2.57	2.60	2.62	2.60						
<u>SORGHUM, No. 2 Yellow, Kansas City (per cwt.)</u>													
1971	1.80	1.91	2.06	2.06	2.07	2.07	2.09	2.08	2.09	2.11	2.05	2.21	2.05
1972	2.17	2.42	2.88	3.06	2.88	2.86	2.83	3.09	3.61	3.93	4.72	4.37	3.24
1973	4.37	4.31	4.37	4.71	4.99	4.64	4.03	3.84	3.99	5.02	5.79	5.64	4.64
1974	6.32	6.10	5.36	4.95	4.55	4.48	4.64	4.60	4.53	4.82	5.13	4.66	5.01
1975	4.53	4.36	4.33	4.36	4.47	4.62	4.47						
<u>Year</u>													
beginning	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Simple average
July	:												
<u>Dollars per bushel</u>													
<u>OATS, No. 2 Extra Heavy White, Minneapolis</u>													
1971	.63	.61	.64	.64	.66	.68	.69	.69	.66	.67	.70	.70	.66
1972	.69	.70	.71	.76	.81	.91	.88	.84	.84	.86	.91	.93	.82
1973	.93	1.28	1.32	1.26	1.25	1.32	1.55	1.66	1.52	1.26	1.35	1.43	1.34
1974	1.63	1.68	1.71	1.87	1.80	1.74	1.64	1.64	1.49	1.72	1.78	1.59	1.69
1975	1.59	1.70	1.68	1/1.64	1.69	1.65	1.67	1.66	1.64	1.67			
<u>BARLEY, No. 3 or Better, Feed, Minneapolis</u>													
1971	1.00	.95	.99	1.04	1.04	1.04	1.07	1.07	1.05	1.06	1.08	1.05	1.04
1972	.96	.98	1.11	1.16	1.14	1.27	1.34	1.20	1.19	1.25	1.36	1.51	1.21
1973	1.67	2.12	2.12	2.02	1.80	2.12	2.34	2.51	2.32	1.74	2.10	2.36	2.10
1974	2.36	2.69	2.48	3.07	3.18	2.89	2.82	2.59	2.26	2.24	2.05	1.67	2.52
1975	2.04	2.77	3.00	2.83	2.42	2.23	2.11	2.26	2.38	2.39			
<u>Barley, No. 3 or Better Malting 70% or Better Plump, Minneapolis</u>													
1971	1.25	1.10	1.11	1.17	1.17	1.17	1.20	1.19	1.19	1.19	1.20	1.22	1.18
1972	1.22	1.21	1.26	1.34	1.34	1.45	1.59	1.58	1.61	1.64	1.66	1.74	1.47
1973	1.82	2.45	2.64	2.64	2.62	2.64	2.76	3.27	3.57	2.98	2.94	3.11	2.79
1974	3.38	3.77	4.00	4.42	4.78	4.65	4.62	4.45	4.15	4.34	4.28	3.97	4.23
1975	3.83	3.65	3.93	3.83	3.56	3.35	3.24	3.21	3.22	3.18			

1/ Beginning October 1975 heavy white.
 Source: Grain Market News, AMS, USDA.

Table 18.--Average price received by farmers, United States, by months, 1971-76

Year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
beginning													weighted by sales
October													1/
<u>Dollars</u>													
<u>CORN, per bushel</u>													
1971	1.00	.974	1.08	1.09	1.09	1.10	1.13	1.15	1.13	1.14	1.15	1.22	1.08
1972	1.19	1.20	1.42	1.39	1.35	1.37	1.42	1.61	1.99	2.03	2.68	2.15	1.57
1973	2.17	2.18	2.39	2.59	2.76	2.68	2.41	2.45	2.57	2.91	3.37	3.30	2.55
1974	3.45	3.32	3.27	3.07	2.86	2.67	2.68	2.66	2.68	2.72	2.95	2.76	3.03
1975	2.62	2.33	2.37	2.44	2.48	2.50	2.46						2/2.46
<u>SORGHUM, per 100 pounds</u>													
1971	1.76	1.78	1.86	1.89	1.86	1.87	1.88	1.90	1.98	2.05	2.11	1.87	
1972	2.09	2.19	2.72	2.72	2.60	2.60	2.56	2.66	3.10	3.46	3.64	3.87	2.45
1973	3.65	3.66	3.83	4.03	4.38	4.25	3.78	3.59	3.59	4.15	5.07	5.30	3.82
1974	5.78	5.85	5.33	4.96	4.21	4.03	4.15	4.21	4.15	4.25	4.69	4.56	4.96
1975	4.43	4.05	4.00	4.06	4.09	4.13	4.13						2/4.21
<u>Dollars per bushel</u>													
<u>OATS</u>													
1971	.626	.555	.574	.581	.595	.622	.638	.636	.638	.635	.638	.666	.605
1972	.655	.623	.645	.671	.700	.806	.811	.776	.771	.774	.796	.904	.725
1973	.855	1.13	1.09	1.14	1.13	1.20	1.32	1.44	1.40	1.24	1.27	1.30	1.18
1974	1.37	1.55	1.57	1.68	1.70	1.70	1.62	1.58	1.46	1.51	1.54	1.49	1.53
1975	1.45	1.44	1.45	1.41	1.40	1.42	1.44	1.46	1.46	1.44			2/1.44
<u>BARLEY</u>													
1971	1.07	.868	.919	.960	1.02	1.04	1.04	1.01	.983	.990	1.04	1.09	.993
1972	1.04	.956	1.07	1.17	1.21	1.32	1.42	1.34	1.31	1.31	1.39	1.55	1.21
1973	1.58	2.10	2.16	2.23	2.10	2.19	2.32	2.52	2.61	2.15	2.19	2.25	2.13
1974	2.33	2.78	2.86	3.11	3.41	3.30	3.17	2.89	2.55	2.72	2.75	2.30	2.80
1975	2.35	2.56	2.69	2.68	2.43	2.35	2.31	2.31	2.34	2.31			2/2.42
<u>Dollars per ton</u>													
<u>HAY</u>													
1971	25.60	24.60	24.10	24.30	24.50	24.90	25.30	26.10	29.20	29.70	29.00	28.00	28.10
1972	31.10	30.90	28.50	29.30	29.80	30.30	31.00	33.00	34.60	35.40	35.40	33.90	31.30
1973	37.50	35.20	36.30	39.00	43.10	46.20	46.80	46.00	47.10	47.10	45.40	44.40	41.60
1974	54.00	47.70	48.20	51.10	51.90	51.50	50.30	50.70	50.10	49.30	49.70	52.40	50.90
1975	56.30	53.60	51.20	51.00	50.80	50.30	50.20	51.60	52.70	54.30	54.10	54.10	2/53.00

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States; excludes government payments.

2/ Preliminary.

Table 19—Corn Belt Cattle Feeding

Purchased during Marketed during	Selected expenses at current rates ¹												Apr. Oct.		
	Jan. 75 July	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.	June Dec.	July Jan.	Aug. Feb.	Sept. May	Oct. Apr.	Nov. May	Dec. June	Jan. 76 July	Feb. Aug.	Mar. Sept.
Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head
Expenses:															
600 lb. feeder steer	158.70	161.76	172.50	190.14	213.00	220.86	206.04	225.54	228.54	229.56	226.98	224.76	242.52	238.14	267.72
Transportation to feedlot	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28
(400 miles)	137.70	128.70	121.05	120.60	119.70	120.50	124.40	132.20	124.20	115.20	104.40	105.30	108.90	111.60	112.50
Corn (45 bu.)	40.17	38.05	37.11	37.23	36.70	35.68	35.12	37.93	36.86	35.36	33.46	34.20	35.02	35.87	35.77
Silage (1.7 tons)	24.57	23.22	22.14	22.95	22.82	22.82	22.82	23.76	24.30	24.84	23.36	23.62	23.62	23.62	23.49
Protein supplement	10.10	9.80	10.16	10.30	10.05	9.20	8.70	9.10	9.55	9.70	9.80	10.20	10.30	10.55	10.35
(270 lb.)	9.52	9.52	8.40	8.40	8.40	8.40	8.40	8.76	8.76	8.76	9.80	9.80	10.24	10.24	9.90
Labor (4 hours)	4.76	4.76	4.20	4.20	4.20	4.20	4.20	4.38	4.38	4.38	4.90	4.90	5.12	5.12	5.12
Management ²	2.90	2.89	2.88	2.95	2.95	2.95	2.95	2.99	3.00	3.03	3.03	3.04	3.10	3.11	3.13
Vet medicine	8.33	8.49	9.06	9.51	10.65	11.04	10.41	9.79	10.71	10.86	10.33	10.21	10.11	10.91	10.72
(6 mo.)	Power, equip., fuel, shelter, depreciation	13.52	13.48	13.42	13.61	13.74	13.85	13.94	14.01	14.14	14.12	14.18	14.45	14.45	14.55
Death loss (1% of purchase)	2.31	1.62	1.72	1.90	2.13	2.21	2.08	2.08	2.08	2.26	2.30	2.27	2.25	2.38	2.68
Transportation (100 miles)	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	2.31	2.31	2.31	2.31	2.31
Marketing expenses	5.85	5.83	5.80	5.89	5.94	6.00	6.03	6.06	6.11	6.11	6.13	6.25	6.27	6.29	6.30
Miscellaneous & indirect costs	428.65	419.06	421.06	438.59	461.22	468.77	456.77	469.03	480.78	475.69	462.11	461.77	464.40	483.74	511.65
Total	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.
Selling price/cwt., required to cover feed and feeder costs (1050 lb.)	35.36	34.43	34.57	36.31	38.31	38.97	37.83	39.05	40.04	39.39	38.15	38.12	38.34	40.40	40.04
Selling price/cwt., required to cover all costs (1050 lb.)	40.82	39.91	40.10	41.77	43.93	44.64	43.50	44.67	45.79	45.30	44.01	43.98	44.12	46.44	46.07
Feed cost per 100 lb. gain	50.21	46.80	48.91	47.90	45.23	45.01	41.84	42.06	43.53	41.13	38.00	36.14	43.12	21.10	20.47
Net margin/cwt.	+9.39	+6.89	+8.81	+6.13	+1.30	+3.7	-2.32	-5.87	-9.65	-2.18				39.52	40.50
Prices															
Feeder steer choice (600-700 lb., Kansas City/cwt.)	26.45	26.96	28.75	31.69	35.50	36.81	34.70	34.34	37.59	38.09	38.26	37.83	37.46	40.42	39.69
Corn/bu.	3.06	2.86	2.69	2.68	2.66	2.68	2.66	2.72	2.96	2.76	2.56	2.32	2.34	2.42	2.46
Hay/ton ³	50.50	49.00	50.75	51.50	50.25	46.00	42.75	45.50	47.75	48.50	49.00	51.00	51.50	52.75	51.75
Corn silage /ton ⁴	23.63	22.38	21.83	21.95	20.99	20.66	22.31	21.68	20.80	19.68	20.12	20.60	21.10	21.04	20.47
32-36% Protein supp./cwt. ⁵	9.10	8.60	8.20	8.50	8.45	8.45	8.45	8.50	8.50	8.65	8.75	8.75	8.75	8.75	8.76
Farm Labor/hour ⁶	2.38	2.38	2.38	2.10	2.10	2.10	2.19	2.19	2.19	2.45	2.45	2.45	2.45	2.56	2.56
Interest annual rate	10.50	10.50	10.50	10.00	10.00	10.00	9.50	9.50	9.50	9.00	9.00	9.00	9.00	9.00	9.00
Transportation rate/cwt. 100 mile	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22
Marketing expenses paid by farmers (1910-14=100)	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Total	617	615	612	621	627	632	636	639	645	644	644	647	659	661	665

¹ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with average of individual feeders. For individual use, adjust expenses and prices for management, production level and locality of

² Assumes one hour at twice the labor rate.

³ Adjusted monthly by the Index of prices paid by farmers for commodities, services, interest, taxes and wage rates.

⁴ Converted from cents/mile for a 44,000 pound haul.

⁵ Average price paid by farmers in Iowa and Illinois.

⁶ Corn silage price derived from a midwest terminal market.

Table 20—Corn Belt Hog Feeding¹

Purchased during Marketed during	Selected costs at current rates ²															
	Jan. 75 May	Feb. June	Mar. July	Apr. Aug.	May Sept.	June Oct.	July Nov.	Aug. Dec.	Sept., Jan. 76	Oct. Feb.	Nov. Dec.	Jan. 76 May	Feb. June	Mar. July	Apr. Aug.	
Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head	Dollars per head		
Expenses:																
40 lb. feeder pig	30.10	35.75	39.75	43.05	44.00	44.65	44.10	46.75	59.81	56.55	48.94	44.19	48.38	50.16	48.80	51.28
Corn (11 bu.)	33.66	31.46	29.59	29.48	29.26	29.48	29.92	32.56	30.36	28.16	25.52	25.74	26.62	27.28	27.50	27.06
Protein supplement	13.84	13.06	12.74	13.06	12.87	13.00	13.06	13.72	13.91	13.78	13.13	13.39	13.52	13.58	13.65	13.65
Labor & management	6.19	6.19	6.19	5.46	5.46	5.46	5.46	5.69	5.69	5.69	6.37	6.37	6.37	6.66	6.66	6.66
(1.3 hrs.)	1.46	1.46	1.45	1.47	1.49	1.50	1.50	1.51	1.53	1.53	1.53	1.53	1.56	1.57	1.57	1.58
Vet medicine	1.05	1.25	1.39	1.43	1.47	1.49	1.47	1.48	1.86	1.79	1.47	1.33	1.45	1.50	1.46	1.54
Interest on purchase																
(4 mo.)																
Power, equipment, shelter, depreciation	3.55	3.54	3.53	3.58	3.61	3.64	3.66	3.68	3.72	3.71	3.71	3.73	3.80	3.81	3.82	3.83
Death loss (4% of purchase)	1.20	1.43	1.59	1.72	1.76	1.79	1.76	1.87	2.39	2.26	1.96	1.77	1.94	2.01	1.95	2.05
Transportation (100 miles)	1.48	1.44	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Marketing expenses & indirect costs36	.36	.36	.37	.37	.37	.37	.38	.38	.38	.38	.38	.39	.39	.39	.39
Total	93.03	96.12	98.21	101.24	101.91	103.00	103.17	109.26	122.27	116.15	104.63	100.05	105.65	107.42	109.66	
Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	Dollars per cwt.	
Selling price/cwt. required to cover feed and feeder costs (220 lb.)	35.28	36.49	37.31	38.90	39.15	39.60	39.58	42.29	47.31	44.77	39.81	37.87	40.24	41.37	40.89	41.81
Selling price/cwt. required to cover all costs (220 lb.)	42.29	43.69	44.64	46.02	46.32	46.82	46.90	49.66	55.12	52.80	47.56	45.48	48.02	49.35	48.83	49.85
Feed cost per 100 lb. gain	26.39	24.73	23.52	23.63	23.41	23.60	23.88	25.71	24.59	23.34	21.49	21.74	22.30	22.70	22.86	22.62
Barrows and gilts ⁷ /cwt.	46.44	51.19	57.17	58.10	61.23	58.52	49.74	48.33	48.40	48.85	46.71	47.89				
Net margin/cwt.	+4.15	+7.50	+12.53	+12.08	+14.91	+11.70	+2.84	-1.33	-6.72	-3.95	-8.85	+2.41				
Prices:																
40 lb. feeder pig (So. Missouri)	30.10	35.75	39.75	43.05	44.00	44.65	44.10	46.75	59.81	56.55	48.94	44.19	48.38	50.16	48.80	51.28
Corn (bu.)	3.06	2.86	2.69	2.68	2.66	2.68	2.72	2.96	2.76	2.56	2.32	2.34	2.42	2.48	2.50	2.46
38-42% protein supp. ³ /cwt.	10.65	10.05	9.80	10.05	9.90	10.00	10.05	10.55	10.70	10.60	10.10	10.30	10.45	10.50	10.50	
Labor and management /hr.	4.76	4.76	4.76	4.20	4.20	4.20	4.38	4.38	4.38	4.38	4.90	4.90	4.90	5.12	5.12	
Interest rate (annual)	10.50	10.50	10.50	10.00	10.00	10.00	10.00	9.50	9.50	9.50	9.00	9.00	9.00	9.00	9.00	
Transportation rate/cwt.																
100 miles)																
Marketing expenses ⁴																
Index of prices paid by farmers (1970-14=100)	617	615	612	621	627	632	636	639	645	644	644	647	659	661	664	665

¹ Although a majority of hog feeding operations in the Corn Belt are from farrow to finish, relative fattening expenses will be similar. Represents only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes and wage rates. ² Average price received by farmers in Iowa and Illinois. ³ Average prices paid by farmers in Iowa and Illinois. ⁴ Assumes an owner-operator receiving twice the farm labor rate. ⁵ Converted to cents/mile for a 44,000 pound haul. ⁶ Yards plus commission fees at a midwest terminal market.

Table 21.--Livestock, poultry and milk-feed price ratios, by months, 1971-76

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
HOG/CORN, U.S. Basis 1/													
1971	: 19.5	19.3	18.2	20.9	23.5	21.2	19.9	21.7	22.7	24.1	24.3	23.0	21.5
1972	: 23.0	22.3	20.8	22.3	25.4	27.9	24.7	21.9	18.7	20.3	21.0	20.4	22.4
1973	: 18.8	18.6	16.0	15.5	14.2	13.1	12.7	10.7	9.4	11.8	10.7	10.2	13.5
1974 2/	: 10.8	11.1	11.7	12.4	13.4	14.3	14.7	17.0	17.6	19.9	19.0	21.2	15.3
1975 2/	: 22.1	21.0	20.0	19.5	19.3	18.2	19.1						
BEEF-STEER/CORN, Omaha 3/													
1971	: 28.3	29.0	27.6	28.5	29.5	28.6	27.6	28.1	30.8	31.0	29.5	27.1	28.8
1972	: 27.3	25.1	24.7	27.1	28.1	30.6	29.8	24.9	20.8	20.5	19.5	19.0	24.8
1973	: 17.9	16.7	15.8	17.4	15.7	15.5	16.7	16.1	14.2	13.7	13.1	12.0	15.4
1974 2/	: 10.9	10.9	11.1	11.8	12.5	13.1	15.0	17.6	18.2	17.2	15.0	16.6	14.2
1975 2/	: 17.4	17.7	17.6	16.0	14.9	13.8	16.6						
MILK/FEED, U.S. Basis 4/													
1971	: 1.84	1.88	1.85	1.82	1.81	1.78	1.72	1.69	1.66	1.68	1.72	1.75	1.77
1972	: 1.77	1.75	1.64	1.59	1.57	1.52	1.51	1.40	1.26	1.35	1.26	1.51	1.51
1973	: 1.57	1.62	1.57	1.53	1.51	1.49	1.51	1.45	1.36	1.29	1.16	1.21	1.44
1974 2/	: 1.21	1.22	1.20	1.25	1.33	1.38	1.36	1.36	1.36	1.40	1.41	1.54	1.34
1975 2/	: 1.62	1.77	1.80	1.75	1.66	1.64	1.62						
EGG/FEED, U.S. Basis 5/													
1971	: 6.9	7.2	8.2	7.1	7.0	7.6	6.5	6.4	6.4	7.0	6.9	7.7	7.1
1972	: 6.9	8.0	8.5	9.0	7.3	7.7	7.9	6.9	6.4	7.1	8.3	8.6	7.7
1973	: 8.2	8.6	8.5	8.8	8.4	7.5	7.0	6.2	5.8	6.2	5.7	6.7	7.3
1974 2/	: 6.5	6.6	7.2	7.1	7.2	7.6	6.5	6.6	6.3	6.4	6.7	7.5	6.9
1975 2/	: 7.1	8.1	9.0	8.7	8.4	7.5	7.4						
BROILER/FEED, U.S. Basis 6/													
1971	: 2.7	2.7	2.5	2.8	3.1	3.1	2.7	2.8	3.0	3.3	3.0	3.2	2.9
1972	: 2.9	2.7	2.6	2.9	3.1	3.5	3.9	3.3	2.9	3.4	4.0	3.5	3.2
1973	: 2.9	2.5	2.3	2.5	2.8	2.7	2.7	2.7	2.5	2.6	2.3	2.6	2.6
1974 2/	: 2.5	2.6	2.4	2.8	2.9	2.9	2.8	3.1	3.4	3.8	3.5	3.6	3.0
1975 2/	: 3.5	3.4	3.0	3.1	3.2	3.0	3.0						
TURKEY/FEED, U.S. Basis 7/													
1971	: 4.7	4.8	5.1	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.6
1972	: 4.3	4.5	4.4	4.0	3.7	4.1	4.8	4.2	3.8	3.9	4.3	4.9	4.2
1973	: 5.0	5.3	4.8	4.0	3.8	3.8	3.4	3.2	3.1	2.9	2.9	3.0	3.8
1974 2/	: 3.0	3.3	3.6	3.6	3.7	3.8	3.5	3.8	3.9	4.2	4.2	4.2	3.7
1975 2/	: 4.2	4.5	4.4	4.1	4.1	3.9	3.9						

1/ Number bushels of corn equal in value to 100 lbs. of hog liveweight. 2/ Preliminary. 3/ Based on price of beef-steers 900-1,100 pounds, choice instead of average grade all steers previously published. 4/ Pounds concentrate ration equal in value to one lb. whole milk. 5/ Number of lbs. of laying feed equal in value to one dozen eggs. 6/ Number of lbs. of broiler grower feed equal in value to one lb broiler liveweight. 7/ Pounds of turkey grower feed equal in value to one lb. turkey liveweight.

Table 22.—Market trends, selected feeds and corn products

Item	Unit	1974/75			1975/76		
		Season	Oct.	Nov.	Dec.	Jan.	Feb.
WHOLESALE, MOSTLY BULK 1/							
Soybean meal, 44%, solvent, Decatur	\$ per ton	131	126	125	128	133	128
Soybean meal, 49-50%, solvent, Decatur	"	142	136	127	132	139	136
Cottonseed meal, 41%, expeller, Memphis	"	120	132	128	140	136	128
Linseed meal, 34%, solvent, Minneapolis	"	127	118	119	132	125	119
Peanut meal, 50%, S.E. mills	"	129	139	134	133	126	129
Meat meal, 50%, Chicago	"	149	147	139	148	154	154
Tankage digester, 60%, Chicago	"	160	157	149	158	164	164
Fishmeal, 65%, domestic, East Coast	"	251	269	270	267	272	279
Gluten feed, 21%, Chicago	"	88	90	86	88	93	82
Gluten meal, 60%, Chicago	"	209	238	238	241	248	251
Brewers' dried grains, 24%, Milwaukee	"	91	99	93	89	104	96
Distillers' dried grains, 28%, Cincinnati	"	117	122	110	98	108	106
Feather meal, Jackson, Mississippi	"	172	170	191	187	190	187
Wheat bran, Kansas City	"	86	89	91	92	82	82
Wheat middlings, Kansas City	"	86	89	91	92	87	81
Rice bran, Arkansas	"	76	75	80	91	95	71
Homing feed, Chicago	"	91	83	81	82	83	77
Alfalfa meal, 17%, dehy., Kansas City	"	81	87	92	99	110	108
Blackstrap molasses, New Orleans	"	52	36	37	46	53	52
Molasses beet pulp, Los Angeles	"	107	116	111	109	108	107
Animal fat, Chicago	\$ per lb.	12.2	13.8	13.2	13.5	13.8	13.4
Urea, 42%, N, Port Huron	\$ per ton	200	185	158	158	158	161
Corn, No. 2, white, Kansas City	\$ per bu.	4.10	2.94	2.72	2.74	2.66	2.93
PRICES PAID, U.S. BASIS 2/							
Soybean meal, 44%	\$ per cwt.	9.33	9.23	8.75	8.74	8.81	8.84
Cottonseed meal, 41%	"	9.29	9.44	9.31	9.37	9.47	9.42
Wheat bran	"	7.42	7.20	7.17	7.26	7.36	7.37
Wheat middlings	"	7.30	7.12	7.11	7.18	7.25	7.26
Broiler grower feed	\$ per ton	169	166	158	160	158	160
Laying feed	"	153	148	143	143	143	145
Turkey grower feed	"	172	170	164	165	165	162
Chick starter	"	172	167	160	161	162	161
Dairy feed, 16%	"	138	136	133	134	136	135
Beef cattle feed, 30% and over 3/	\$ per cwt.	8.21	8.19	8.06	8.15	8.14	8.09
Hog feed, over 29% 4/	\$ per ton	10.43	10.50	10.00	10.10	10.20	10.30
Alfalfa hay, baled	\$ per cwt.	66	66	67	67	68	70
Stock salt	\$ per cwt.	2.77	—	2.90	—	—	—
CORN PRODUCTS, WHOLESALE 5/							
Corn meal, New York	\$ per cwt.	15.47	15.00	14.75	13.70	13.00	13.00
White	"	9.72	9.42	9.12	8.94	8.75	9.17
Yellow	"	9.26	8.77	8.28	8.17	7.94	8.04
Syrup (brewers) New York	c per lb.	12.85	13.21	12.62	10.70	10.29	10.22
Sugar (dextrose), Chicago West	"	20.75	16.55	16.30	15.30	15.30	15.30
High-fructose (dry weight tank car)	"	25.75	17.47	16.45	15.87	15.77	15.66
Chicago wheat	"	—	—	—	—	—	—

1/ Feed Market News, AMS, USDA, except urea which is from Feedstuffs, Miller Publishing Co., Minneapolis, Minnesota.

2/ Agricultural Prices, SRS, USDA. 3/ Now 32-36%. 4/ Now 38-42%. 5/ Milling and Baking News, Kansas City, Mo.

Table 23.--High-protein feed: Quantity available for feeding and high-protein animal units, 1969-75 1/

Year beginning October	Quantity available for feeding (in terms of 44% protein soybean meal equivalent)					High-protein animal units	Per animal unit
	Oilseed meal	Animal protein	Grain protein*	Total			
	- - - 1,000 tons - - -				Million	Founds	
1969	15,311	3,444	976	19,731	105.2	375	
1970	15,227	3,539	1,095	19,861	107.6	369	
1971	15,093	3,616	1,008	19,717	107.2	368	
1972	14,131	3,059	1,134	18,324	105.5	347	
1973	15,799	3,012	1,202	20,013	104.1	384	
1974 2/	14,250	3,331	1,129	18,710	96.6	387	
1975 3/	16,400	3,400	1,175	20,975	99.4	422	
:	:	:	:	:	:	:	

1/ Excludes urea and other nitrogenous compounds.

2/ Preliminary.

3/ Based on May 1976 indications.

*Revised; adjusted for exports of corn gluten feed and meal.

Table 24.--Processed feeds: Estimated use for feed, 1969-75 1/

Feed	Year beginning October						
	1969	1970	1971	1972	1973	1974	1975
	- - - 1,000 tons - - -						
HIGH-PROTEIN							
Oilseed meal							
Soybean 4/	13,582	13,467	13,173	11,972	13,854	12,552	14,800
Cottonseed	1,794	1,693	1,885	2,225	2,096	1,846	1,540
Linseed	182	258	264	212	184	94	180
Peanut	122	173	174	180	130	151	250
Copra	83	99	100	100	—	—	—
Total	15,763	15,690	15,596	14,689	16,264	14,643	16,770
Animal proteins							
Tankage and meat meal	2,014	2,039	1,889	1,739	1,854	1,981	1,950
Fish meal and solubles	567	609	752	462	350	437	500
Commercial dried milk products	230	260	330	330	315	375	750
Noncommercial milk products	350	330	310	350	350	365	
Total	3,161	3,238	3,281	2,881	2,869	3,158	3,200
Grain protein feeds							
Gluten feed and meal*	1,000	1,236	1,067	1,262	1,361	1,340	1,350
Brewers' dried grains	361	361	369	361	348	346	375
Distillers' dried grains	428	382	404	428	458	339	400
Total	1,789	1,979	1,840	2,051	2,167	2,025	2,125
OTHER							
Wheat millfeeds							
Rice millfeeds	4,633	4,499	4,364	4,327	4,332	4,482	4,600
Dried and molasses beet pulp	490	436	479	442	467	570	500
Alfalfa meal	1,675	1,509	1,570	1,566	1,375	1,250	1,550
Fats and oils	1,545	1,584	1,568	1,799	1,550	1,557	1,650
Molasses, inedible	545	570	631	528	546	638	625
Miscellaneous byproduct feeds 5/	3,450	3,550	3,725	3,930	3,650	3,360	3,950
Total	13,438	13,248	13,437	13,692	13,020	12,947	13,975
Grand Total	34,151	34,155	34,154	33,313	34,320	32,773	36,070

1/ Adjusted for stocks, production, foreign trade and nonfeed uses where applicable.

2/ Preliminary.

3/ Based on May 1976 indications.

4/ Includes use in edible soy products.

5/ Allowance for hominy feed, oat millfeeds and screenings.

*Adjusted for export data which are available beginning January 1972.

Table 25.—The soybean meal situation

Month	SOYBEANS			SOYBEAN MEAL		
	Crush	Exports	Stocks at Processor's (1st of month)	Production	Domestic use 3/	Exports
	1973/74	1974/75	1975/76	1973/74	1974/75	1975/76
Million bushels						
October	63	62	71	47	32	63
November	134	122	142	121	95	125
December	207	183	220	179	136	175
January	282	246	295	227	186	227
February	352	300	364	284	219	279
March	428	361	442	342	257	331
April	498	418	500	404	293	318
May	570	471	570	447	318	447
June	639	524	639	483	332	663
July	711	584	711	510	363	570
August	780	648	780	531	396	427
September	821	701	821	539	421	23
Season Total	821	701	825	539	421	525
Million tons						
October	1.46	1.47	1.70	1.11	1.06	1.39
November	3.15	2.92	3.40	2.30	2.06	2.69
December	4.86	4.35	5.21	3.44	3.15	4.14
January	6.61	5.84	6.95	4.78	4.13	5.34
February	8.27	7.12	8.57	5.85	5.05	6.52
March	10.06	8.55	10.39	6.98	6.18	7.91
April	11.70	9.92	11.70	8.11	7.11	8.11
May	13.40	11.17	13.40	9.29	8.16	9.29
June	15.03	12.42	15.03	10.26	9.12	10.26
July	16.73	13.83	16.73	11.62	10.29	11.62
August	18.33	15.36	18.33	12.80	11.44	12.80
September	19.67	16.70	19.4	13.85	12.55	14.8
Season Total	19.67	16.70	19.4	13.85	12.55	14.8

Month	SOYBEANS			SOYBEAN MEAL		
	Crush	Cumulative	Exports	Production	Domestic use 3/	Exports
	1973/74	1974/75	1975/76	1973/74	1974/75	1975/76
Million bushels						
October	63	62	71	47	32	63
November	134	122	142	121	95	125
December	207	183	220	179	136	175
January	282	246	295	227	186	227
February	352	300	364	284	219	279
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December	4.86	4.35	5.21	3.44	3.15	4.14
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March	10.06	8.55	10.39	6.98	6.18	7.91
April	11.70	9.92	11.70	8.11	7.11	8.11
May	13.40	11.17	13.40	9.29	8.16	9.29
June	15.03	12.42	15.03	10.26	9.12	10.26
July	16.73	13.83	16.73	11.62	10.29	11.62
August	18.33	15.36	18.33	12.80	11.44	12.80
September	19.67	16.70	19.4	13.85	12.55	14.8
Season Total	19.67	16.70	19.4	13.85	12.55	14.8

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	Crush	Cumulative	Exports	Production	Domestic use 3/	Exports
	1973/74	1974/75	1975/76	1973/74	1974/75	1975/76
Million bushels						
October	63	62	71	47	32	63
November	134	122	142	121	95	125
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Season Total	821	701	825	539	421	525
Million tons						
October	1.46	1.47	1.70	1.11	1.06	1.39
November	3.15	2.92	3.40	2.30	2.06	2.69
December	4.86	4.35	5.21	3.44	3.15	4.14
January	6.61	5.84	6.95	4.78	4.13	5.34
February	8.27	7.12	8.57	5.85	5.05	6.52
March	10.06	8.55	10.39	6.98	6.18	7.91
April	11.70	9.92	11.70	8.11	7.11	8.11
May	13.40	11.17	13.40	9.29	8.16	9.29
June	15.03	12.42	15.03	10.26	9.12	10.26
July	16.73	13.83	16.73	11.62	10.29	11.62
August	18.33	15.36	18.33	12.80	11.44	12.80
September	19.67	16.70	19.4	13.85	12.55	14.8
Season Total	19.67	16.70	19.4	13.85	12.55	14.8

1/ Preliminary; season total based on May 1976 indications.

2/ Stocks in total positions.

3/ From processing plants.

PERTINENT STATISTICS

Feed and feed Demand Indicators

Item	1973/74				1974/75				1975/76	
	Oct.-Dec.	Jan.-Mar.	April-June	July-Sept.	Oct.-Dec.	Jan.-Mar.	April-June	July-Sept.	Oct.-Dec.	Jan.-Mar.
<i>Percent change from previous year</i>										
Feed										
Feed grains	-2	+6	-1	-15	-20	-23	-30	-29	-2	+20
Total grains	-3	+5	-1	-21	-20	-19	-34	-24	-2	+19
Soybean meal	-6	+18	+18	+46	-8	-14	-10	-4	+31	+24
Beef										
Production	-1	+1	+12	+15	+7	+7	-1	+3	+5	+11
Cattle on feed ¹	+2	-6	-8	-21	-24	-26	-31	-15	+2	+26
Fed slaughter	-6	-10	-1	-7	-14	-7	-19	-9	-11	+13
Pork										
Production	-5	+4	+11	+16	+3	-10	-17	-23	-17	-5
Poultry										
Broiler production ...	+4	+6	+6	+3	-8	-6	-2	+2	+11	+15
Turkey production ...	+3	+38	+25	+6	-17	-23	-18	-7	+9	+24
Egg production	-1	0	-1	-1	-3	-4	-5	-1	0	+1
Slaughter weights										
Beef	0	+2	+3	-1	-4	-4	-5	-6	-5	-1
Hogs	+2	+3	+2	+1	0	-2	-2	-1	+3	0
Broilers	+1	+2	+2	+2	0	0	-1	-2	0	+1
Turkeys	0	+6	+1	+1	-1	-6	0	-1	-3	+5

¹ 23 States as of the first of the quarter.

Meat, milk and egg production

Period	Fed beef ¹	Pork ¹	Broilers and turkeys	Milk	Eggs
	Million pounds	Million pounds	Million pounds	Billion pounds	Million pounds
<i>1972/73</i>					
Oct.-Dec.	4,420	3,507	2,592	27.7	2,212
Jan.-Mar.	4,220	3,262	2,007	28.6	2,186
Apr.-June	3,975	3,178	2,269	31.8	2,208
July-Sept.	3,770	2,791	2,618	28.4	2,130
Total	16,385	12,738	9,486	116.5	8,736
<i>1973/74</i>					
Oct.-Dec.	4,235	3,347	2,680	26.6	2,185
Jan.-Mar.	3,945	3,378	2,173	28.0	2,186
Apr.-June	4,145	3,531	2,458	31.5	2,193
July-Sept.	3,630	3,243	2,725	29.0	2,118
Total	15,955	13,499	10,036	115.1	8,682
<i>1974/75</i>					
Oct.-Dec.	3,695	3,431	2,397	26.9	2,127
Jan.-Mar.	3,705	3,043	1,999	28.1	2,103
Apr.-June	3,290	2,914	2,251	31.4	2,088
July-Sept.	3,205	2,512	2,705	28.7	2,099
Total	13,895	11,900	9,352	115.1	8,417
<i>1975/76</i>					
Oct.-Dec.	3,195	2,836	2,627	27.3	2,129
Jan.-Mar.	4,170	2,895	2,323	29.0	2,128

¹ Estimated from Commercial Slaughter.

Planted Acreage

Crop	1974	1975	Indicated 1976 ¹
	Million Acres	Million Acres	Million Acres
Corn	77.8	77.9	82.7
Sorghum	17.7	18.3	17.9
Oats	18.0	17.4	16.8
Barley	9.0	9.5	9.2
Total	122.5	123.1	126.6
Wheat			
Winter	52.4	56.2	57.2
Durum	4.2	4.8	4.7
Other Spring	14.8	14.1	16.4
Total	71.4	75.1	78.3
Soybeans			
Upland Cotton	13.6	9.6	11.3
Hay ²	60.6	61.9	62.6
Total, grand	321.6	324.3	328.1

¹ Based on April 1, 1976 prospective plantings. ² Harvested acreage.

PERTINENT STATISTICS

Selected livestock and poultry numbers					Feed concentrates consumed by livestock and poultry				
Class	Date	1974	1975	Change	Year beginning October ¹				
		Million head	Million head	Percent	1973	1974	1975 ²	Million tons	Million tons
Hogs and pigs U.S.	June 1	59.4	48.2	-19					
Cattle U.S.	July 1				Annually:				
On Feed		10.4	9.0	-13	Concentrates				
Dairy cows		11.2	11.1	-1	Supply	274.2	223.7	258.5	
Other		117.4	120.2	+2	Fed				
Total		139.0	140.1	+1	Feed grains ...	152.3	114.9	129.3	
Hens and pullets ¹	July 1	280	270	-4	Wheat	1.7	2.8	3.3	
Broilers slaughtered ² ..	July-Sept.	756	774	+2	Rye3	.2	.2	
Hogs and Pigs (14 States)	Sept. 1	50.2	41.5	-17	By product feeds	34.4	32.7	36.0	
Cattle on feed (23 States)	Oct. 1	9.2	9.3	+2	Total, fed ..	188.7	150.6	168.8	
Hens and pullets ¹	Oct. 1	280	276	-1					
Broilers slaughtered ² ..	Oct.-Dec.	651	721	+11	Million	Million	Million		
Hogs and pigs	Dec. 1	55.1	49.6	-10	Grain-consuming animal units (GCAU's) ³				
		1975	1976	Change	Dairy cattle	12.5	12.5	12.3	
		Million head	Million head	Percent	Cattle on feed	20.8	15.6	19.8	
Cattle	Jan. 1				Other cattle	5.4	5.8	5.5	
On feed		10.2	12.9	+26	Hogs	20.0	17.4	16.9	
Dairy cows		11.2	11.1	-1	Poultry	18.0	17.3	17.8	
Other cattle		110.4	104.0	-6	Other livestock ...	1.7	1.7	1.7	
Total		131.8	128.0	-3	Total	78.4	70.3	74.1	
Hens and pullets ¹	Jan. 1	286	279	-2		Tons	Tons	Tons	
Broilers slaughtered ² ..	Jan.-Mar.	671	765	+14	Concentrates fed per GCAU	2.41	2.14	2.28	
Hogs and pigs (14 States)	Mar. 1	40.3	40.9	+1	Quarterly:				
Cattle on feed (23 States)	Apr. 1	8.5	10.9	+28	Concentrates fed Oct.-Dec.	62.0	50.8	53.2	
Hens and pullets ¹	Apr. 1	278	275	-1	Jan.-Mar.	51.8	42.9	50.1	
Broilers placed for marketing in	Jan.-Mar.	768	851	+11	Apr.-June	40.4	29.2		
					July-Sept.	34.5	27.7		
					Total, year ...	188.7	150.6	168.8	

¹ Laying age. ² Under federal inspection.

¹ Except oat and barley supplies which start July 1.

² Estimated, May 1976. ³ Livestock and poultry fed during the October-September feeding year weighted by relative consumption of grain and other concentrates; 1 unit is equal to 1 milk cow.

Table 26.--Feed and Industrial Molasses: Estimated supply and distribution, 1965-75

Year beginning: October	PRODUCTION						Million gallons	Inship- ments Puerto Rico	Imports Puerto Rico	Total U.S. supply	
	Cane		Refiners' blackstrap:		Total cane	Beet	Citrus	Corn hydrol	Total pro- duction		
	Florida	Louisiana	Hawaii	;	;	;	;	;	;	;	;
1965	39	47	60	37	183	115	10	24	332	12	304
1966	40	43	60	39	182	113	17	20	332	5	351
1967	43	55	61	38	197	104	9	19	329	6	358
1968	37	51	63	46	197	136	14	21	368	6	693
1969	35	40	58	47	180	156	12	21	369	3	721
1970	38	46	55	46	185	160	10	22	377	2	750
1971	43	43	56	52	194	161	8	22	385	*	818
1972	69	57	55	57	238	166	10	23	437	1	420
1973	62	44	54	47	3/213	164	11	23	411	1	858
1974 1/	53	42	52	36	4/190	156	10	23	379	---	825
1975 2/	70	44	56	46	5/225	200	8	24	457	---	740
										400	857

Livestock feed 6/	DISTRIBUTION						Million gallons	Exports Puerto Rico	Mainland	Total
	Distilled spirits and alcohol		Other 7/		Domestic use	8/				
	;	;	;	;	;	;				
1965	481	15	150	646	17				2	19
1966	511	26	150	687	18				1	19
1967	513	21	150	684	10				9	19
1968	555	6	155	716	6				5	11
1969	577	11	155	743	3				7	10
1970	617	7	155	779	3				2	5
1971	647	6	160	813	1				5	6
1972	678	6	160	844	*				14	14
1973	639	13	160	812	1				13	14
1974 1/	575	17	162	734	---				6	6
1975 2/	675	10	164	849	---				8	8

1/ Preliminary. 2/ Forecast May 1976. 3/ Includes 6 million gallons for Texas. 4/ Includes 7 million gallons for Texas. 5/ Includes 9 million gallons for Texas. 6/ Residual; includes other minor uses and waste. 7/ Allowance for pharmaceutical products, yeast, citric acid, vinegar, pesticides, etc. Also includes small quantities of edible syrups. 8/ Not adjusted for change in stocks for which data are not available. *Less than 500,000 bushels.

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CORN CROP DEVELOPMENT—WHAT TO LOOK FOR¹

Watch for delays in corn planting. Planting was late in 1973 and 1974 but was nearly on schedule in 1975. In 1973, the summer and fall were close to ideal and a record crop was harvested. In 1974, unfavorable weather began in mid-May and, except for August, continued right through harvest; the results are well documented with the 71-bushel average yield. If plantings are delayed beyond the usual time frame, yields will be reduced for that crop even under normal growing conditions. A general rule is that yields are reduced about 1 bushel for each day seeding is delayed after May 10.

Cold wet weather immediately after planting will slow germination and enhance disease and weed problems.

Corn is relatively tolerant to stress from moisture during the vegetative stage. Above normal temperatures during May and June encourage good development and high yields.

Weather conditions during tasseling and silking are extremely important to yields. Stress results in fewer grains per ear, or barrenness. 1974 is an excellent example. Extreme heat during late June and the first 3 weeks of July caused extensive barrenness. Yield reductions of over 50 percent can result from relatively brief periods of wilting.

Grain filling, which usually begins in late July and carries into September, is less sensitive to weather than silking and tasseling, but it is still very important. Below-normal temperatures and above-normal precipitation encourage maximum filling. Weather stress hastens maturity, shortening the filling period.

¹Based on *Weekly Weather and Crop Bulletin*, USDA and USDC, April 16, 1976.

